Appendix C

Claim Support to the 1987 Specification and the 1981 Priority Document

Claim Language of Instant Application	Applicants' Priority U.S. Pat. No. '490		Instant Specification	
	Reference	Language	Reference	Language
2. A method of outputting a multimedia presentation	Column 19 line 64 to column 20 line 2.	This signal instructs microcomputer, **205**, to transmit the first overlay to TV set, **202**, for as long as it receives the same instruction signal from processor, **204**. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 26 lines 4-11.	... "GRAPHICS ON". Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
			Page 451 line 3.	And the Fig. 1C combining is displayed.
	Column 19 lines 31-34.	FIG **6C** can also illustrate how programing delivered at different times to one place can be co-ordinated to give a multimedia presentation at one time in one place.	Page 18 lines 24-27.	Fig. 7C is a block diagram of signal processing apparatus and methods selecting receivable information and programming and controlling combined medium, multi-channel presentations.
			page 450 line 27 to page 451 line 11.	(To accomplish all this has required only that the subscriber of microcomputer, 205, [and other subscribers at other stations] cause the installation and connection of the apparatus shown in the figures of this submission, especially Fig. 7 (and 7C); caused his microcomputer, 205, to be preprogrammed as described above; and preinformed microcomputer, 205, of his wish to view said "Wall Street Week" program by causing the aforementioned select-WSW information to be recorded at said microcomputer, 205.) Then the combined medium combining process described above in "One Combined Medium" and in examples #1, #2, #3, #4, etc. commences. And the Fig. 1C combining is displayed. But the combining of Fig. 1C is just part of a larger process. When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, the

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				program instruction set in the first message of the "Wall Street Week" example instructs microcomputer, 205, to generate not one but a plurality overlays. The combining of Fig. 1C is merely the first.
at a receiver station adapted to	Column 17 lines 47-53.	FIG 6 illustrates one possible configuration of equipment in a home or office or other television and/or radio receiving site. Consideration of FIGS. 6F and 6G is facilitated by consideration, first, of individual examples of the types of co-ordinated presentations that the signal apparatus and methods described here can permit.	Page 390 lines 30-35.	Fig. 7 exemplifies one embodiment of an ultimate receiver station; is a subscriber station in the field distribution system, 93, of the intermediate transmission station of Fig. 6; and may be a home, an office, a theater, a hotel, or any other station where programming such as television or radio is displayed to persons.
			Page 396 lines 8-10.	Features, benefits, and modes of operation of the station of Fig. 7 are demonstrated in the following individual examples.
receive a plurality of signals, said method comprising the steps of:	Column 19 lines 27-29.	... and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."	Page 445 line 24 to page 446 line 1.	... instructions causes controller, 20, to switch power on to monitor, 202M, and commence transferring the television output transmission of microcomputer, 205, to said monitor, 202M; ... Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, and to tune monitor, 202M, in a predetermined fashion.
			Page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio ...
	Column 19 lines 35-37.	Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day.	Page 449 lines 13-26.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at

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				each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.)
receiving said plurality of signals,	Column 19 lines 27-29.	...and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."	Page 445 line 24 to page 446 line 1.	...instructions causes controller, 20, to switch power on to monitor, 202M, and commence transferring the television output transmission of microcomputer, 205, to said monitor, 202M; ... Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, and to tune monitor, 202M, in a predetermined fashion.
			Page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio ...
	Column 19 lines 35-37.	Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day.	Page 449 lines 13-26.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that

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				apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.)
at least a portion of said plurality of signals being received from	Column 19 lines 27-29.	…and also microcomputer, **205**, may instruct switch, **216**, to turn TV set, **202**, on and tuner, **215**, to tune appropriately to "Wall Street Week."	Page 445 line 24 to page 446 line 1.	… instructions causes controller, 20, to switch power on to monitor, 202M, and commence transferring the television output transmission of microcomputer, 205, to said monitor, 202M; … Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, and to tune monitor, 202M, in a predetermined fashion.
			Page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio …
a source external to said receiver station,	Column 19 lines 60-63.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission.	Page 59 lines 29-33.	A SPAM message is the modality whereby the original transmission station that originates said message controls specific addressed apparatus at subscriber stations. The information of any given SPAM transmission consists of a series or stream of sequentially transmitted SPAM messages.
			Page 25 line 34 to page 26 line 1.	At this point, an instruction signal is generated at said program originating studio, embedded in the programing transmission, and transmitted.

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			Page 90 lines 4-7. Applicants teach this as the composition of the instruction signal of page 25 line 34. See page 26 lines 1-4 and 20-28, page 89 lines 3-6, and page 90 lines 4-11.	The second message is of the information associated with the second combining synch command. Said second command has a "00" header, an execution segment, and a meter-monitor …
said plurality of signals including at least two	Column 19 lines 27-29.	…and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."	Page 445 line 24 to page 446 line 1.	… instructions causes controller, 20, to switch power on to monitor, 202M, and commence transferring the television output transmission of microcomputer, 205, to said monitor, 202M; … Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, and to tune monitor, 202M, in a predetermined fashion.
			Page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio …
	Column 19 lines 35-37.	Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day.	Page 449 lines 13-26.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber

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				stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.)
media;	Column 1 lines 6-8.	At the present time, vast amounts of programing are transmitted through various media throughout the United States....	Page 1 lines 27-28.	But television, radio, and broadcast print are only mass media.
storing a first	Column 19 lines 35-41.	Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It **records** those prices that relate to the stocks in its stored portfolio.	Page 449 lines 13-35.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.) Alternatively, microcomputer, 205, is caused in a predetermined fashion (for example, by a SPAM message a given transmission monitored by signal processor, 200, in any of the above described fashions) automatically to telephone a remote data service computer, by means of network, 262, in a fashion well known in the art, and to cause said remote computer to select and transmit the particular closing price datum or data of the stock or stocks of the portfolio of said microcomputer,

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				205, thereby causing said microcomputer, 205, to record said datum or data in a predetermined fashion.
medium included in said at least a portion of said plurality of signals to	In general, Column 3 lines 48-56. For example, see "One Digital Data Ch."	Another method has application at receiver sites such as private homes or public places like theaters, hotels, brokerage offices, etc., whether commercial establishments or not. This method provides techniques whereby, automatically, single channel, single medium presentations, be they television, radio, or other electronic transmissions, may be recorded, co-ordinated in time with other programing previously transmitted and recorded, or processed in other fashions. [See Fig. 6C.]	In general, Page 86 lines 12-14. For example, see "One Digital Data Channel," or, Page 85 lines 33-35.	(Hereinafter, the preferred normal location for transmitting signals in any given communication medium is called, the "normal transmission location".) [See Fig. 7C] In broadcast print or data communications, the preferred normal transmission location for SPAM signals is in the same location as the conventional information.
provide a first portion of said multimedia presentation;	Column 19 line 64 to column 20 line 1.	This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer generated graphic of his own stocks' performance ...	Page 26 lines 4-10.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the ...
determining content of a second medium	Column 19 lines 17-23.	... processor or monitor, 12, which reacts, in a predetermined fashion by passing also externally to microcomputer, 205, all signals that it passes to buffer/ comparator, 14. Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18. Page 267 lines 20-28 from example #5.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, ... All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said

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			Page 436 line 9 to page 437 line 3.	microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.) Receiving said Select-WSW-Program- Unit message causes decoder, 203, … to input …. the information segment of said message to the CPU of microcomputer, 205, …. The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said … enable-WSW-on-CC13…. Said instructions contain one instance, and … program-unit-of-interest information that is … preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	… to receive the transmission of cable channel 13; …
received in said plurality of signals;	Column 9 lines 53-55.	The local oscillator, being thus sequenced, will allow each signal decoder, 30 and 40, to receive a particular frequency at a	Page 257 line 24 to page 258 line 19.	Said detection-complete information causes controller, 20, to cause oscillator, 6, to cause the selection of the next channel in the

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		particular time interval.		predetermined television channel selection pattern: wireless channel 9. Automatically oscillator, 6, causes mixer, 3, to select the frequency of channel 9 and input said frequency of interest, at a fixed frequency, to decoder, 30 .... Controller, 20, has capacity for keeping track of elapsed time, and after determining in a predetermined fashion that a particular predetermined period of time has elapsed from the input of wireless channel 9 to decoder, 30, controller, 20, ... causes oscillator, 6, to cause the selection of the next channel in the predetermined television channel selection pattern: wireless channel 13.
			Page 265 line 27 to Page 266 line 21.	Said radio-detection-complete information causes ... controller, 20, to cause oscillator, 6, to cause the selection of the next frequency in the predetermined radio frequency selection pattern: 99.0 MHz. Automatically oscillator, 6, causes mixer, 2, to select said frequency and input it, at a fixed frequency, to decoder, 40 .... After determining, in a predetermined fashion, that a particular predetermined period of time has elapsed from the input of said 99.0 MHz frequency to decoder, 40, controller, 20, ... causes oscillator, 6, to cause the selection of the next frequency in the predetermined radio frequency selection pattern: 100.0 MHz.
coordinating, at said receiver station	Column 19 lines 31-34.	FIG 6C can also illustrate how programing delivered at different times to one place can be co-ordinated to give a multimedia presentation at one time in one place.	Page 18 lines 24-27.	Fig. 7C is a block diagram of signal processing apparatus and methods selecting receivable information and programming and controlling combined medium, multi-channel presentations.
			page 450 line 27 to page 451 line 11.	(To accomplish all this has required only that the subscriber of microcomputer, 205, [and other subscribers at other stations] cause

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				the installation and connection of the apparatus shown in the figures of this submission, especially Fig. 7 (and 7C); caused his microcomputer, 205, to be preprogrammed as described above; and preinformed microcomputer, 205, of his wish to view said "Wall Street Week" program by causing the aforementioned select-WSW information to be recorded at said microcomputer, 205.)
				Then the combined medium combining process described above in "One Combined Medium" and in examples #1, #2, #3, #4, etc. commences. And the Fig. 1C combining is displayed.
				But the combining of Fig. 1C is just part of a larger process. When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, the program instruction set in the first message of the "Wall Street Week" example instructs microcomputer, 205, to generate not one but a plurality overlays. The combining of Fig. 1C is merely the first.
			In general, Page 40 line 31 to page 41 line 3.	(Hereinafter, stations that originate broadcast transmissions are called "original transmission stations," stations that receive and retransmit broadcast transmissions are called "intermediate transmission stations", and stations where subscribers view programming are called "ultimate receiver stations.") At said stations, SPAM signals address, control, and coordinate diverse apparatus,.....
			For example, see page 469 lines 1-2.	AUTOMATING U. R. STATIONS ... EXAMPLES #9 AND #10 CONTINUED COORDINATING COMPUTERS, TELEVISION, AND PRINT
under computer control, a presentation of	Column 19 lines 60-66.	At this point, an instruction signal is generated in the television studio	Page 25 line 33 to page 26 line 2..	Then the host says, "And here is what your portfolio did." At this point, an instruction

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		originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205. This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, …		signal is generated at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205; and executed …
			Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed to process said information automatically. Controller, 39, is preprogrammed to … correct errors in retained received information by means of forward error correction techniques well known in the art; to convert, as may be required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; … to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus.
			Page 26 lines 4-8.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M.
said first portion of said multimedia presentation	Column 19 line 67 to column 20 line 1.	The viewer then sees a microcomputer generated graphic of his own stocks' performance …	Page 26 lines 8-11.	TV monitor, 202M, then displays … the microcomputer generated graphic of the subscriber's own portfolio performance …
with a presentation of said second medium	Column 19 lines 67 to column 20 line 2.	The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 451 line 3.	And the Fig. 1C combining is displayed.
			Page 26 lines 8-11.	TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer

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				generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
based on said step of determining; and	Column 19 lines 17-23.	... processor or monitor, 12, which reacts, in a predetermined fashion by passing also externally to microcomputer, 205, all signals that it passes to buffer/ comparator, 14. Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, ...
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, ... to input .... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on- CC13....
				Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and

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				determines a match with said second instance.
				Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	... to receive the transmission of cable channel 13; ...
	Column 19 lines 27-29.	...and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."	Page 443 lines 19-24, and	Executing said additional 2nd-stage-enable-WSW-program instructions at the station of Fig. 7 causes controller, 20, first to cause the apparatus of said station to commence transferring the decrypted television information of the "Wall Street Week" program transmission to decoder, 203, and microcomputer, 205.
			page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said program, to display the video image of said information, and to emit sound in accordance with said audio ....
	Column 19 lines 42-44.	Microcomputer, 205, is preprogramed to respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programing transmission.	Page 21 lines 20-24.	Microcomputer, 205, is preprogrammed to .... respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programming transmission.
outputting said multimedia presentation to a viewer or listener at said receiver station	Column 19 line 64 to column 20 line 2.	This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 26 lines 4-11.	... "GRAPHICS ON". Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own

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			Page 451 line 3.	portfolio performance overlaid on the studio generated graphic. And the Fig. 1C combining is displayed.
based on said step of coordinating such that	Column 19 lines 60-66.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, **203**, and transferred via processor, **204**, to microcomputer, **205**. This signal instructs microcomputer, **205**, to transmit the first overlay to TV set, **202**, …	Page 25 line 33 to page 26 line 2..	Then the host says, "And here is what your portfolio did." At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205; and executed …
			Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed to process said information automatically. Controller, 39, is preprogrammed to … correct errors in retained received information by means of forward error correction techniques well known in the art; to convert, as may be required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; … to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus.
			Page 26 lines 4-8.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M.
content of said first	Column 19 line 67 to	The viewer then sees a microcomputer	Page 26 lines 8-11.	TV monitor, 202M, then displays … the

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portion has a	column 20 line 1.	generated graphic of his own stocks' performance …		microcomputer generated graphic of the subscriber's own portfolio performance …
predetermined	Column 19 lines 59-60.	Then the host says, "And here is what your portfolio did."	Page 25 lines 33-34.	Then the host says, "And here is what your portfolio did."
	Column 19 lines 45-53.	When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening,	Page 451 lines 6-7.	When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, …
		several instruction signals are identified by decoder, 203, and transferred to microcomputer, 205.	Page 23 line 35 to page 24 line 4.	Subsequently, a second series of instructions is embedded and transmitted at said program originating studio. Said second series is detected and converted into usable digital signals by decoder, 203, and inputted to microcomputer, 205, in the same fashion as the first series.
			Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed … to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus.
		These signals instruct microcomputer, 205,	Page 24 lines 5-16.	Microcomputer, 205, evaluates the initial signal word or words which instruct it to load at RAM (from the input buffer to which decoder, 203, inputs) and run the information of a particular set of instructions that follows said word or words just as the information of a file named FILE.EXE, recorded on the contained floppy disk, would be loaded at RAM (from the input buffer to which the disk drive of said disk inputs) and run were the command "FILE" entered from the console keyboard to the system level of the installed disk operating system. (Hereinafter, such a set

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	to generate several graphic video overlays,	Page 451 lines 7-11.	of instructions that is loaded and run is called a "program instruction set."
			...the program instruction set in the first message of the "Wall Street Week" example instructs microcomputer, 205, to generate not one but a plurality overlays. The combining of Fig. 1C is merely the first.
	which microcomputer, 205, has the means to generate and transmit and TV set, 202, has the means to receive and display, and to	Page 19 line 29 to page 20 line 20.	Microcomputer, 205, is a conventional microcomputer system ... for generating computer graphic information; for receiving a composite video transmission; for combining said graphic information onto the video information of said transmission by graphic overlay techniques, well known in the art; and for outputting the resulting combined information to a TV monitor, 202M, in a composite video transmission. ... TV monitor, 202M, has capacity for receiving composite video and audio transmissions and for presenting a conventional television video image and audio sound.
	transmit these overlays to TV set, 202,	Page 26 lines 4-8.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M.
	upon command.	Page 44 lines 14-17.	A command is an instance of signal information that is addressed to particular subscriber station apparatus and that causes said apparatus to perform a particular function or functions.
		Page 26 lines 20-28.	(Hereinafter, an instruction such as the above signal of "GRAPHICS ON" that causes subscriber station apparatus to execute a combining operation in synchronization is

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relationship to content of said second medium.				called a "combining synch command." Said initial signal word or words that preceded the above program instruction set provide another example of a combining synch command in that said word or words synchronized all subscriber station computers in commencing loading and running information for a particular combining.)
	Column 19 lines 67 to column 20 line 2.	The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 451 line 3.	And the Fig. 1C combining is displayed.
			Page 26 lines 8-11.	TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
	Column 19 line 53-56.	Subsequently in the program, the host says, "Here is what the Dow Jones Industrials did is the past week," and a studio generated graphic is pictured.	Page 25 lines 26-33.	During this time the program may show the so-called "talking head" of the host as he describes the behavior of the stock market over the course of the week. Then the host says, "Now as we turn to the graphs, here is what the Dow Jones Industrials did in the week just past," and a studio generated graphic is transmitted. Fig. 1B shows the image of said graphic as it appears on the video screen of TV monitor, 202M.
3. The method of claim 2, wherein said first medium is stored in said computer.	Column 19 lines 35-41.	Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It **records** those prices that relate to the stocks in its stored portfolio.	Page 449 lines 13-35.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing

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				stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.) Alternatively, microcomputer, 205, is caused in a predetermined fashion (for example, by a SPAM message a given transmission monitored by signal processor, 200, in any of the above described fashions) automatically to telephone a remote data service computer, by means of network, 262, in a fashion well known in the art, and to cause said remote computer to select and transmit the particular closing price datum or data of the stock or stocks of the portfolio of said microcomputer, 205, thereby causing said microcomputer, 205, to record said datum or data in a predetermined fashion.
4. The method of claim 3, wherein said computer performs said step of determining.	Column 11 lines 50-57.	... if controller/computer, 73, determines that programing incoming via receiver, 53, should be transmitted immediately to the field distribution system, 93, via cable channel modulator, 87, controller/computer, 73, instructs matrix switch, 75, to configure its switches so as to transfer programing transmissions inputted from TV receiver, 53, to the output that leads to modulator, 87.	Page 328 line 22 to page 329 line 1.	For example, computer, 73, receives a given SPAM message that contains given "program unit identification code" information and the added source mark information of said message identifies distribution amplifier, 63. Receiving said message causes computer, 73, to determine, in a predetermined fashion, that said "code" information matches particular preprogrammed schedule information of programming that is scheduled to be retransmitted immediately upon receipt to field distribution system, 93, via cable channel modulator, 87. In its preprogrammed fashion, so determining causes computer, 73, to cause matrix switch, 75, to configure its switches so as to transfer the programming transmission inputted (via distribution amplifier, 63) to

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				matrix switch, 75, from TV receiver, 53, to that output of matrix switch, 75, that outputs to modulator, 87.
5. The method of claim 2, wherein each of said plurality of signals is received from an external transmitter	Column 18 lines 48-51.	Several separate news services transmit news on different channels carried on the multi-channel cable transmission to converter boxes, **222** and **201**, and to signal processor, **200**.	Page 420 lines 21-29.	Two remote stations--remote news-service-A station and remote news-service-B station--transmit, from geographically separate locations, two different broadcast print transmissions. The intermediate transmission station of Fig. 6 receives and retransmits information the transmissions of said remote stations on digital data channels A and B, respectively, that are inputted to converter boxes, 222 and 201, and to signal processor, 200.
	Column 19 lines 20-25.	Analyzing these identifier signals in a predetermined fashion, microcomputer, **205**, determines that "Wall Street Week" is being televised on channel X. Then, in a predetermined fashion, microcomputer, **205**, may instruct tuner, **214**, to switch box, **201**, to channel X ...	Page 436 line 9 to page 437 line 6.	Receiving said Select-WSW-Program-Unit message causes decoder, 203, ... to input ... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputted is the aforementioned determine-whether-to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on-CC13 .... Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer,

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				205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20. Receiving said please-fully-enable-WSW- on-CC13-at- particular-8:30 information causes controller, 20, in a predetermined fashion, to prepare particular apparatus ....
			Page 439 lines 9-15.	...to cause selected apparatus of said station--cable converter box, 201, ... to receive the transmission of cable channel 13; ...
			Page 295 lines 6-8.	Then, automatically, controller, 20, causes a selected tuner, 214, to tune to the frequency of cable channel 13, thereby causing its associated converter box, 201, to convert its....
			Page 439 lines 9-15.	...to cause selected apparatus of said station--cable converter box, 201, ... to receive the transmission of cable channel 13; ...
	Column 18 lines 62-65.	In a predetermined fashion, either microcomputer, 205, or signal processor, 200, instructs tuner, 223, to set cable converter box, 222, to the proper channel,....	Page 423 lines 11-13.	Receiving said message causes said controller, 20, to cause a selected cable converter box, 222, to receive the transmission identified by said channel mark; ....
			Page 424 lines 2-9.	Then receiving a particular to-223 instruction from said control processor, 20A, causes controller, 20, to transmits particular instructions, via said control information transmission link, to said tuner, 223, thereby causing said tuner, 223, to tune its associated cable converter box, 222, the to the particular channel transmission of said multi-channel cable transmission that is identified by said channel mark.

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	Column 19 lines 35-37.	Each weekday, microcomputer, **205**, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day.	Page 449 lines 13-26.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which the remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.)
station.	Column 10 lines 24-28.	FIGS. **3A**, **3B** and **3C** illustrates one instance of such use. FIGS. **3A, 3B**, and **3C** illustrate the use of Signal Processing Apparatus and Methods at a cable television system "head end" transmission facility that cablecasts several channels of television programing.	Page 324 lines 18-21.	Fig. 6 illustrates Signal Processing Apparatus and Methods at an intermediate transmission station that is a cable television system "head end" and that cablecasts several channels of television programming.
6. The method of claim 5, wherein said external transmitter station is an intermediate transmitter station, said method further comprising the step of	Column 10 lines 15-20.	The signal processing apparatus outlined in FIGS. **1, A, 2B,** and **2C,** and their variants as appropriate, can be used to automate the operations of an intermediate transmission point whether it be a broadcast station transmitting only a single channel of programing or a cable system cablecasting many channels.	Page 324 lines 8-17.	The signal processing apparatus outlined in Figs. 2, 2A, 2B, 2C, and 2D, and their variants as appropriate, can be used to automate the operations of intermediate transmission stations that receive and retransmit programming. The stations so automated may transmit any form of electronically transmitted programming, including television, radio, print, data, and combined medium programming and may range in scale of operation from wireless broadcast stations that transmit a single programming transmission to

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				cable systems that cablecast many channels simultaneously.
	Column 10 lines 24-28.	FIGS. 3A, 3B and 3C illustrates one instance of such use. FIGS. 3A, 3B, and 3C illustrate the use of Signal Processing Apparatus and Methods at a cable television system "head end" transmission facility that cablecasts several channels of television programing.	Page 324 lines 18-21.	Fig. 6 illustrates Signal Processing Apparatus and Methods at an intermediate transmission station that is a cable television system "head end" and that cablecasts several channels of television programming.
programming	Column 19 lines 42-44.	Microcomputer, 205, is preprogramed to respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programing transmission.	Page 21 lines 20-24.	Microcomputer, 205, is preprogrammed to … respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programming transmission.
said receiver station to process signals originated by said external transmitter station.	Column 16 lines 25-43.	One particular advantage of these methods for monitoring programing is that, by locating the identifier signals in the audio and/or video and/or other parts of the programing that are conventionally recorded by, for example, conventional video cassette recorders, these methods provide techniques for gathering statistics on what is recorded on video cassette recorders and on how people replay such recordings. For example, a person might instruct video cassette recorder, 135, automatically to record the NBC Network Nightly News as broadcast over station WNBC in New York City. Recorder, 135, might receive the programing over Manhattan Cable TV channel 4 and record the programing from 7:00 PM to 7:30 PM on the evening of July 15, 1985. Each discrete bit of this information could be conveyed to recorder, 135, in a signal unit or units in the programing so received and recorded. Decoder, 136, would identify these signals and transfer them to signal processor, 130.	Page 319 line 23 to page 320 line 10.	One particular advantage of these methods for monitoring programming is that, by embedding the SPAM information in the audio and/or video and/or other parts of the programming that are conventionally recorded by, for example, conventional video cassette recorders, these methods provide techniques for gathering statistics on what is recorded, for example, on video and audio cassette recorders and on how people replay such recordings. For example, a subscriber might instruct video recorder/player, 217, automatically to record the NBC Network Nightly News as broadcast over station WNBC in New York City. Recorder, 217, might receive the programming over Manhattan Cable TV channel 4 and record the programming at the time of original broadcast transmission--from 7:00 PM to 7:30 PM on the evening of July 15, 1985. Each discrete bit of this information could be transmitted to the subscriber station of Fig. 5 in meter-monitor information (of a SPAM command with an appropriate execution segment such as information of the pseudo command)

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				embedded in the transmitted programming. So embedding and transmitting said meter-monitor information would cause recorder, 217, to record said information. In addition, decoder, 218, would detect said information and transfer said information to signal processor, 200, ...
	Column 18 lines 48-51.	Several separate news services transmit news on different channels carried on the multi-channel cable transmission to converter boxes, 222 and 201, and to signal processor, 200.	Page 420 lines 21-29.	Two remote stations--remote news-service-A station and remote news-service-B station--transmit, from geographically separate locations, two different broadcast print transmissions. The intermediate transmission station of Fig. 6 receives and retransmits information the transmissions of said remote stations on digital data channels A and B, respectively, that are inputted to converter boxes, 222 and 201, and to signal processor, 200.
	For example Column 19 lines 60-63.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission.	*For example* Page 59 lines 29-33.	A SPAM message is the modality whereby the original transmission station that originates said message controls specific addressed apparatus at subscriber stations. The information of any given SPAM transmission consists of a series or stream of sequentially transmitted SPAM messages.
			Page 25 line 34 to page 26 line 1.	At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted.
			Page 90 lines 4-7. Applicants teach this as the composition of the instruction signal of page 25 line 34. See page 26 lines 1-4 and 20-28, page 89 lines 3-6, and page 90 lines 4-	The second message is of the information associated with the second combining synch command. Said second command has a "00" header, an execution segment, and a meter-monitor ...

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	Column 19 lines 35-37.	Each weekday, microcomputer, **205**, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day.	11. Page 449 lines 13-26.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.)
7. The method of claim 2, wherein said content of	Column 19 lines 59-60.	Then the host says, "And here is what your portfolio did."	Page 25 lines 33-34.	Then the host says, "And here is what your portfolio did."
said second medium explains a significance of said content of said first portion of said multimedia presentation.	Column 19 line 67 to column 20 line 1.	The viewer then sees a microcomputer generated graphic of his own stocks' performance …	Page 26 lines 8-11.	TV monitor, 202M, then displays … the microcomputer generated graphic of the subscriber's own portfolio performance …
8. The method of claim 7, wherein said content of said second medium explains said significance in audio	Column 19 lines 59-60.	Then the host says, "And here is what your portfolio did."	Page 25 lines 33-34.	Then the host says, "And here is what your portfolio did."

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and said receiver station includes				
a first selective transfer device, said method further comprising the step of causing said first selective transfer device to communicate said audio to an audio output device.	Column 19 lines 27-29.	...and also microcomputer, **205**, may instruct switch, **216**, to turn TV set, **202**, on and tuner, **215**, to tune appropriately to "Wall Street Week."	Page 445 line 24 to page 446 line 1.	... instructions causes controller, 20, to switch power on to monitor, 202M, and commence transferring the television output transmission of microcomputer, 205, to said monitor, 202M; ... Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, and to tune monitor, 202M, in a predetermined fashion.
			Page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio ...
9. The method of claim 8, wherein said second medium comprises further information for output at said receiver station in addition to said audio and said receiver station includes a	Column 19 line 53-56.	Subsequently in the program, the host says, "Here is what the Dow Jones Industrials did is the past week," and a studio generated graphic is pictured.	Page 25 lines 26-33.	During this time the program may show the so-called "talking head" of the host as he describes the behavior of the stock market over the course of the week. Then the host says, "Now as we turn to the graphs, here is what the Dow Jones Industrials did in the week just past," and a studio generated graphic is transmitted. Fig. 1B shows the image of said graphic as it appears on the video screen of TV monitor, 202M.
plurality of selective transfer devices, said method further comprising the step of	Column 19 lines 24-25.	... microcomputer, **205**, may instruct tuner, **214**, to switch box, **201**, to channel X....	Page 295 lines 6-8.	Then, automatically, controller, 20, causes a selected tuner, 214, to tune to the frequency of cable channel 13, thereby causing its associated converter box, 201, to convert its...
			Page 439 lines 9-15.	... to cause selected apparatus of said

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	Column 19 lines 27-29.	... and also microcomputer, **205**, may instruct switch, **216**, to turn TV set, **202**, on and tuner, **215**, to tune appropriately to "Wall Street Week."		station--cable converter box, 201, ... to receive the transmission of cable channel 13;...
			Page 445 line 24 to page 446 line 1.	... instructions causes controller, 20, to switch power on to monitor, 202M, and commence transferring the television output transmission of microcomputer, 205, to said monitor, 202M; ... Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, and to tune monitor, 202M, in a predetermined fashion.
			Page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio ....
causing a second of said plurality of selective transfer devices to communicate said further information for output to	Column 19 lines 20-25.	Analyzing these identifier signals in a predetermined fashion, microcomputer, **205**, determines that "Wall Street Week" is being televised on channel X. Then, in a predetermined fashion, microcomputer, **205**, may instruct tuner, **214**, to switch box, **201**, to channel X ...	Page 436 line 9 to page 437 line 6.	Receiving said Select-WSW-Program-Unit message causes decoder, 203, ... to input ... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputted is the aforementioned determine-whether-to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on-CC13 .... Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said

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				program-unit-of-interest information and **determines a match** with said second instance.
				
				    Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
				
				    Receiving said please-fully-enable-WSW- on-CC13-at- particular-8:30 information causes controller, 20, in a predetermined fashion, to prepare particular apparatus ….

			Page 439 lines 9-15.	…to cause selected apparatus of said station–cable converter box, 201, … to receive the transmission of cable channel 13;
			Page 295 lines 6-8.	… Then, automatically, controller, 20, causes a selected tuner, 214, to tune to the frequency of cable channel 13, thereby causing its associated converter box, 201, to convert its…
			Page 439 lines 9-15.	…to cause selected apparatus of said station–cable converter box, 201, …. to receive the transmission of cable channel 13; …
an additional output device separate from said audio output device.	Column 19 lines 27-29.	…and also microcomputer, **205,** may instruct switch, **216,** to turn TV set, **202,** on and tuner, **215,** to tune appropriately to "Wall Street Week."	Page 445 line 24 to page 446 line 1.	… instructions causes controller, 20, to switch power on to monitor, 202M, and commence transferring the television output transmission of microcomputer, 205, to said monitor, 202M; … Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, and to tune monitor, 202M, in a predetermined fashion.
			Page 446 lines 17-21.	In so doing, controller, 20, causes monitor,

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	Column 19 line 53-56.	Subsequently in the program, the host says, "Here is what the Dow Jones Industrials did is the past week," and a studio generated graphic is pictured.		202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said program, and to emit sound in accordance with said audio ...
			Page 25 lines 26-33.	During this time the program may show the so-called "talking head" of the host as he describes the behavior of the stock market over the course of the week. Then the host says, "Now as we turn to the graphs, here is what the Dow Jones Industrials did in the week just past," and a studio generated graphic is transmitted. Fig. 1B shows the image of said graphic as it appears on the video screen of TV monitor, 202M.
10. The method of claim 9, wherein said second medium comprises television, including video and said audio,	Column 19 lines 27-29.	...and also microcomputer, **205**, may instruct switch, **216**, to turn TV set, **202**, on and tuner, **215**, to tune appropriately to "Wall Street Week."	Page 445 line 24 to page 446 line 1.	... instructions causes controller, 20, to switch power on to monitor, 202M, and commence transferring the television output transmission of microcomputer, 205, to said monitor, 202M; ... Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, and to tune monitor, 202M, in a predetermined fashion.
			Page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said program, and to emit sound in accordance with said audio ...
wherein said further information for output includes said video, and	Column 19 line 53-56.	Subsequently in the program, the host says, "Here is what the Dow Jones Industrials did is the past week," and a studio generated graphic is pictured.	Page 25 lines 26-33.	During this time the program may show the so-called "talking head" of the host as he describes the behavior of the stock market over the course of the week. Then the host

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				says, "Now as we turn to the graphs, here is what the Dow Jones Industrials did in the week just past," and a studio generated graphic is transmitted. Fig. 1B shows the image of said graphic as it appears on the video screen of TV monitor, 202M.
wherein said additional output device separate from said audio output device includes a video output device.	Column 19 lines 27-29. *See "One Digital Data Ch." in Fig. 6C.*	...and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."	Page 445 line 24 to page 446 line 1.	... instructions causes controller, 20, to switch power on to monitor, 202M, and commence transferring the television output transmission of microcomputer, 205, to said monitor, 202M; ... Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, and to tune monitor, 202M, in a predetermined fashion.
			Page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio ...
11. The method of claim 2, wherein said plurality of signals includes a digital data channel.	Column 19 lines 35-37. *See "One Digital Data Ch." in Fig. 6C.*	Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day.	Page 449 lines 13-26. *See "One Digital Data Channel." in Fig. 7C.*	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which

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				remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.)
12. The method of claim 11, wherein said receiver station receives said first medium in said digital data channel.	Column 19 lines 35-41.	Each weekday, microcomputer, **205**, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.	Page 449 lines 13-35.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.) Alternatively, microcomputer, 205, is caused in a predetermined fashion (for example, by a SPAM message a given transmission monitored by signal processor, 200, in any of the above described fashions) automatically to telephone a remote data service computer, by means of network, 262, in a fashion well known in the art, and to cause said remote computer to select and transmit the particular closing price datum or data of the stock or stocks of the portfolio of said microcomputer, 205, thereby causing said microcomputer, 205, to record said datum or data in a predetermined fashion.

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13. The method of claim 2, wherein said step of determining comprises processing an identifier.	Column 19 lines 17-23.	... processor or monitor, 12, which reacts, in a predetermined fashion by passing also externally to microcomputer, 205, all signals that it passes to buffer/ comparator, 14. Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, ...
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, ... to input ... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on-CC13...
				Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance.
				Determining a match causes microcomputer,

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				205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	... to receive the transmission of cable channel 13; ...
14. The method of claim 13, wherein said identifier identifies said content of said second medium.	Column 19 lines 20-23.	Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new-program-message (#5) and the 1st-new-radio-program- message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 435 lines 16-25.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, of the station of Fig. 7 and 7C detects one instance of the Select-WSW-Program-Unit SPAM message of the station of Fig. 6 ... Receiving said Select-WSW-Program-Unit message causes the apparatus of said signal processor, 200, to input said message to the microcomputer, 205, of said station.
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program-Unit message causes decoder, 203, ... to input ... the information segment of said message to the CPU of microcomputer, 205, and to cause said CPU to execute the information so inputted as a machine language job. The information so inputted is the aforementioned

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				determine-whether-to-select instructions that contain said particular specific-WSW information and said please-fully-enable-WSW-on-CC13-at-particular-8:30 information. Executing said determine-whether-to-select instructions causes microcomputer, 205, to.... Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	...to receive the transmission of cable channel 13;...
15. The method of claim 14, wherein said content of said second medium includes audio.	Column 19 lines 27-29.	...and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."	Page 445 line 24 to page 446 line 1.	... instructions causes controller, 20, to switch power on to monitor, 202M, and commence transferring the television output transmission of microcomputer, 205, to said monitor, 202M; ... Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, and to tune monitor, 202M, in a predetermined fashion.

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			Page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio …
	Column 19 lines 59-60.	Then the host says, "And here is what your portfolio did."	Page 25 lines 33-34.	Then the host says, "And here is what your portfolio did."
16. The method of claim 14, wherein said content of said second medium includes video.	Column 19 lines 27-29.	…and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."	Page 445 line 24 to page 446 line 1.	… instructions causes controller, 20, to switch power on to monitor, 202M, and commence transferring the television output transmission of microcomputer, 205, to said monitor, 202M; … Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, and to tune monitor, 202M, in a predetermined fashion.
			Page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio …
	Column 19 line 53-56.	Subsequently in the program, the host says, "Here is what the Dow Jones Industrials did is the past week," and a studio generated graphic is pictured.	Page 25 lines 26-33.	During this time the program may show the so-called "talking head" of the host as he describes the behavior of the stock market over the course of the week. Then the host says, "Now as we turn to the graphs, here is what the Dow Jones Industrials did in the week just past," and a studio generated graphic is transmitted. Fig. 1B shows the image of said graphic as it appears on the video screen of TV monitor, 202M.

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17. The method of claim 2, further comprising the step of storing said second medium at said receiver station.	Column 19 lines 25-27.	… and [microcomputer, **205**,] may instruct control system, **220**, to turn video recorder, **217**, on and record "Wall Street Week," …	Page 445 lines 24-27. Page 446 lines 18-23.	… instructions causes controller, 20, … to switch power on to video recorder/player, 217, … … controller, 20, … causes recorder/player, 217, to record said information of the "Wall Street Week" program.
18. The method of claim 17, wherein said second medium is stored based on said step of determining.	Column 19 lines 20-25.	Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X. Then, in a predetermined fashion, microcomputer, 205, may instruct tuner, 214, to switch box, 201, to channel X ….	Page 436 line 9 to page 437 line 6.	Receiving said Select-WSW-Program-Unit message causes decoder, 203, … to input …. the information segment of said message to the CPU of microcomputer, 205, …. The information so inputed is the aforementioned determine-whether-to-select instructions that contain said particular specific-WSW information and said … enable-WSW-on-CC13 …. Said instructions contain one instance, and … program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and determines a match with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20. Receiving said please-fully-enable-WSW-on-CC13-at- particular-8:30 information causes controller, 20, in a predetermined fashion, to prepare particular apparatus ….

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			Page 439 lines 9-15.	…to cause selected apparatus of said station--cable converter box, 201, … to receive the transmission of cable channel 13; …
			Page 295 lines 6-8.	Then, automatically, controller, 20, causes a selected tuner, 214, to tune to the frequency of cable channel 13, thereby causing its associated converter box, 201, to convert its…
			Page 439 lines 9-15.	…to cause selected apparatus of said station--cable converter box, 201, … to receive the transmission of cable channel 13; …

Claim 19 is cancelled.

20. A method of outputting a multimedia presentation	Column 19 line 64 to column 20 line 2.	This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 26 lines 4-11.	… "GRAPHICS ON". Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
			Page 451 line 3.	And the Fig. 1C combining is displayed.
	Column 19 lines 31-34.	FIG 6C can also illustrate how programing delivered at different times to one place can be co-ordinated to give a multimedia presentation at one time in one place.	Page 18 lines 24-27.	Fig. 7C is a block diagram of signal processing apparatus and methods selecting receivable information and programming and controlling combined medium, multi-channel presentations.
			page 450 line 27 to	(To accomplish all this has required only

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			page 451 line 11.	that the subscriber of microcomputer, 205, [and other subscribers at other stations] cause the installation and connection of the apparatus shown in the figures of this submission, especially Fig. 7 (and 7C); caused his microcomputer, 205, to be preprogrammed as described above; and preinformed microcomputer, 205, of his wish to view said "Wall Street Week" program by causing the aforementioned select-WSW information to be recorded at said microcomputer, 205.) Then the combined medium combining process described above in "One Combined Medium" and in examples #1, #2, #3, #4, etc. commences. And the Fig. 1C combining is displayed. But the combining of Fig. 1C is just part of a larger process. When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, the program instruction set in the first message of the "Wall Street Week" example instructs microcomputer, 205, to generate not one but a plurality overlays. The combining of Fig. 1C is merely the first.
at a receiver station adapted to	Column 17 lines 47-53.	FIG 6 illustrates one possible configuration of equipment in a home or office or other television and/or radio receiving site. Consideration of FIGS. 6F and 6G is facilitated by consideration, first, of individual examples of the types of co-ordinated presentations that the signal apparatus and methods described here can permit.	Page 390 lines 30-35. Page 396 lines 8-10.	Fig. 7 exemplifies one embodiment of an ultimate receiver station; is a subscriber station in the field distribution system, 93, of the intermediate transmission station of Fig. 6; and may be a home, an office, a theater, a hotel, or any other station where programming such as television or radio is displayed to persons. Features, benefits, and modes of operation of the station of Fig. 7 are demonstrated in the following individual examples.
process a plurality of signals, said plurality of	Column 19 lines 17-23.	... processor or monitor, 12, which reacts, in a predetermined fashion by passing also	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the

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signals including			externally to microcomputer, **205**, all signals that it passes to buffer/ comparator, **14**. Analyzing these identifier signals in a predetermined fashion, microcomputer, **205**, determines that "Wall Street Week" is being televised on channel X.	Page 267 lines 20-28 from example #5.	apparatus of the signal processor, 200, … All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
				Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, … to input … the information segment of said message to the CPU of microcomputer, 205, … . The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said … enable-WSW-on- CC13… Said instructions contain one instance, and … program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to

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				the controller, 20.
			Page 439 lines 14-15.	... to receive the transmission of cable channel 13; ...
	Column 19 line 64 to column 20 line 1.	This signal instructs microcomputer, **205**, to transmit the first overlay to TV set, **202**, for as long as it receives the same instruction signal from processor, **204**. The viewer then sees a microcomputer generated graphic of his own stocks' performance ...	Page 26 lines 4-10.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the ...
first and	Column 19 lines 17-23.	... processor or monitor, **12**, which reacts, in a predetermined fashion by passing also externally to microcomputer, **205**, all signals that it passes to buffer/ comparator, **14**. Analyzing these identifier signals in a predetermined fashion, microcomputer, **205**, determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, ...
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, ... to input ... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on-

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				CC13... Said instructions contain one instance, and ...program-unit-of-interest information that is preprogramed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	... to receive the transmission of cable channel 13; ....
second	This signal instructs microcomputer, **205,** to transmit the first overlay to TV set, **202,** for as long as it receives the same instruction signal from processor, **204.** The viewer then sees a microcomputer generated graphic of his own stocks' performance	Column 19 line 64 to column 20 line 1.	Page 26 lines 4-10.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the ....
media of said multimedia presentation, said method comprising the steps of:	At the present time, vast amounts of programing are transmitted through various media throughout the United States....	Column 1 lines 6-8.	Page 1 lines 27-28.	But television, radio, and broadcast print are only mass media.
receiving a first of	The local oscillator, being thus sequenced,	Column 9 lines 53-55.	Page 257 line 24 to	Said detection-complete information causes

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said plurality of signals from		will allow each signal decoder, **30** and **40**, to receive a particular frequency at a particular time interval.	page 258 line 19.	controller, 20, to cause oscillator, 6, to cause the selection of the next channel in the predetermined television channel selection pattern: wireless channel 9. Automatically oscillator, 6, causes mixer, 3, to select the frequency of channel 9 and input said frequency of interest, at a fixed frequency, to decoder, 30 …. Controller, 20, has capacity for keeping track of elapsed time, and after determining in a predetermined fashion that a particular predetermined period of time has elapsed from the input of wireless channel 9 to decoder, 30, controller, 20, … causes oscillator, 6, to cause the selection of the next channel in the predetermined television channel selection pattern: wireless channel 13.
			Page 265 line 27 to Page 266 line 21.	Said radio-detection-complete information causes … controller, 20, to cause oscillator, 6, to cause the selection of the next frequency in the predetermined radio frequency selection pattern: 99.0 MHz. Automatically oscillator, 6, causes mixer, 2, to select said frequency and input it, at a fixed frequency, to decoder, 40 … After determining, in a predetermined fashion, that a particular predetermined period of time has elapsed from the input of said 99.0 MHz frequency to decoder, 40, controller, 20, … causes oscillator, 6, to cause the selection of the next frequency in the predetermined radio frequency selection pattern: 100.0 MHz.
a source external to said receiver station,	Column 18 lines 48-51.	Several separate news services transmit news on different channels carried on the multi-channel cable transmission to converter boxes, **222** and **201**, and to signal processor, **200**.	Page 420 lines 21-29.	Two remote stations--remote news-service-A station and remote news-service-B station--transmit, from geographically separate locations, two different broadcast print transmissions. The intermediate transmission station of Fig. 6 receives and retransmits information the

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				transmissions of said remote stations on digital data channels A and B, respectively, that are inputted to converter boxes, 222 and 201, and to signal processor, 200.
said first of said plurality of signals including an identifier;	Column 19 lines 14-15.	... pass all program and channel identifiers on all programing being cablecast on the multi-channel system.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, of the station of Fig. 7 and 7C ...
			Page 248 lines 22-26 from example #5.	Via a conventional multi- channel cable transmission, in a fashion well known in the art, four channels of conventional television programming and two conventional FM radio signals are inputted to a first alternate contact of switch, 1, and to mixer, 2.
			Page 250 lines 13-16 from example #5.	Example #5 begins with the embedding and transmitting, at the remote station that originates the "Wall Street Week" broadcast, of the first message of the "Wall Street Week" program ...
			Page 252 lines 15-35 from example #5.	Then, in a predetermined fashion, control processor, 39J, determines that said first command contains subject matter meter-monitor information causing said control processor, 39J, to transmit a message that consists of ... execution segment information that is addressed to microcomputer, 205, (and that causes microcomputer, 205, to process the information of the meter- monitor segment immediately following said execution segment information as new programming now being transmitted on the channel of the channel mark of said meter-monitor segment segment) then meter-monitor segment information that includes the "**program unit identification code**" and subject matter information of said first command and **the channel mark of cable**

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				channel 13 … (Said message whose transmission is caused by receiving said first command enables microcomputer, 205, in a fashion described more fully below, to tune automatically to receive the program that said "program unit identification code" identifies if said program is of interest, ….
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new-program-message (#5) and the 1st-new-radio-program- message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
processing said first of said plurality of signals to	Column 7 lines 50-54.	Processor or monitor, 12, analyzes, in a pre-determined fashion, the signal words and units that it receives and determines whether they are to be passed to external equipment or to buffer/comparator, 14, for further processing or both.	Page 31 lines 10-14.	Controller, 12, receives the signals inputted from buffer/comparator, 8, and decryptor, 10; analyzes said signals in a predetermined fashion; and determines whether they are to be transferred to external equipment or to buffer/comparator, 14, or both.
provide said first medium of said multimedia presentation	Column 19 lines 27-29.	…and also microcomputer, **205**, may instruct switch, **216**, to turn TV set, **202**, on and tuner, **215**, to tune appropriately to "Wall Street Week."	Page 445 line 24 to page 446 line 1.	… instructions causes controller, 20, to switch power on to monitor, 202M, and commence transferring the television output transmission of microcomputer, 205, to said monitor, 202M; … Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, and to tune monitor, 202M, in a predetermined fashion.
			Page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and

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				audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio ....
and said identifier;	Column 19 lines 18-20.	[processor or monitor, **12**, reacts] ... in a predetermined fashion by passing also externally to microcomputer, **205**, all signals that it passes to buffer/ comparator, **14**.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, ...
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new-program-message (#5) and the 1st-new-radio-program- message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 268 line 28 to page 269 line 12 from example #5.	In example #5, controller, 12, is preprogrammed to process monitor information, and completing the controlled functions invoked by any given message causes controller, 12, automatically to process the information of said message as monitor information, in the fashion of controller, 39, of decoder, 203, in example #3. ... Automatically, control processor, 12J, transfers to buffer/comparator, 14, via matrix switch, 12 I, header information that identifies a transmission of monitor information of available programming then all of the information that is recorded at said SPAM-input-signal memory. (In each example #5 case, the information that is transferred-- together with its newly added header information--continues to be called by its previously assigned name; for example, the

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Column 19 lines 14-15.			... pass all program and channel identifiers on all programing being cablecast on the multi-channel system.		1st-old-radio-program-message (#5).)
				Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, of the station of Fig. 7 and 7C ...
				Page 248 lines 22-26 from example #5.	Via a conventional multi- channel cable transmission, in a fashion well known in the art, four channels of conventional television programming and two conventional FM radio signals are inputted to a first alternate contact of switch, 1, and to mixer, 2.
				Page 250 lines 13-16 from example #5.	Example #5 begins with the embedding and transmitting, at the remote station that originates the "Wall Street Week" broadcast, of the first message of the "Wall Street Week" program ...
				Page 252 lines 15-35 from example #5.	Then, in a predetermined fashion, control processor, 39J, determines that said first command contains subject matter meter-monitor information causing said control processor, 39J, to transmit a message that consists of ... execution segment information that is addressed to microcomputer, 205, (and that causes microcomputer, 205, to process the information of the meter- monitor segment immediately following said execution segment information as new programming now being transmitted on the channel of the channel mark of said meter-monitor segment segment) then meter-monitor segment information that includes the "**program unit identification code**" and subject matter information of said first command and **the channel mark of cable channel 13** ... (Said message whose transmission is caused by receiving said first command enables microcomputer, 205, in a

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				fashion described more fully below, to tune automatically to receive the program that said "program unit identification code" identifies if said program is of interest, …
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new-program-message (#5) and the 1st-new-radio-program- message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
identifying content of said first medium based on said identifier;	Column 19 lines 17-23.	… processor or monitor, 12, which reacts, in a predetermined fashion by passing also externally to microcomputer, 205, all signals that it passes to buffer/ comparator, 14. Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, …
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, … to input … the information segment of said message to the CPU of microcomputer, 205, … The information so inputted is the aforementioned determine-whether- to-select instructions that

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				contain said particular specific-WSW information and said … enable-WSW-on-CC13…
				Said instructions contain one instance, and … program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance.
				Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	… to receive the transmission of cable channel 13; …
controlling said receiver station, based on said step of identifying, to	Column 19 lines 27-29.	…and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."	Page 443 lines 19-24, and	Executing said additional 2nd-stage-enable-WSW-program instructions at the station of Fig. 7 causes controller, 20, first to cause the apparatus of said station to commence transferring the decrypted television information of the "Wall Street Week" program transmission to decoder, 203, and microcomputer, 205.
			page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio ….

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Column 19 lines 20-23.	Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new-program-message (#5) and the 1st-new-radio-program- message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
		Page 435 lines 16-25.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, of the station of Fig. 7 and 7C detects one instance of the Select-WSW-Program-Unit SPAM message of the station of Fig. 6 .... Receiving said Select-WSW-Program-Unit message causes the apparatus of said signal processor, 200, to input said message to the microcomputer, 205, of said station.
		Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program-Unit message causes decoder, 203, ... to input ... the information segment of said message to the CPU of microcomputer, 205, and to cause said CPU to execute the information so inputted as a machine language job. The information so inputted is the aforementioned determine-whether-to-select instructions that contain said particular specific-WSW information and said please-fully-enable-WSW-on-CC13-at-particular-8:30 information. Executing said determine-whether-to-select instructions causes microcomputer, 205, to... Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205,

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				contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	...to receive the transmission of cable channel 13;...
respond to a processor instruction which is separately received from	Column 19 lines 42-44.	Microcomputer, 205, is preprogramed to respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programing transmission.	Page 21 lines 20-24.	Microcomputer, 205, is preprogrammed to .... respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programming transmission.
	Column 19 lines 60-63.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission.	Page 59 lines 29-33.	A SPAM message is the modality whereby the original transmission station that originates said message controls specific addressed apparatus at subscriber stations. The information of any given SPAM transmission consists of a series or stream of sequentially transmitted SPAM messages.
			Page 25 line 34 to page 26 line 1.	At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted.
			Page 90 lines 4-7. Applicants teach this as the composition of the instruction signal of	The second message is of the information associated with the second combining synch command. Said second command has a "00" header, an execution segment, and a meter-

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			page 25 line 34. See page 26 lines 1-4 and page 89 lines 3-6, and page 90 lines 4-11.	monitor …
said identifier;	Column 19 lines 20-23.	Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 267 lines 20-28 from example #5.	ALL eight of said messages are commands. The 1st- and 3rd-new-program-message (#5) and the 1st-new-radio-program- message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 435 lines 16-25.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, of the station of Fig. 7 and 7C detects one instance of the Select-WSW-Program-Unit SPAM message of the station of Fig. 6 … Receiving said Select-WSW-Program-Unit message causes the apparatus of said signal processor, 200, to input said message to the microcomputer, 205, of said station.
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program-Unit message causes decoder, 203, … to input … the information segment of said message to the CPU of microcomputer, 205, and to cause said CPU to execute the information so inputted as a machine language job. The information so inputted is the aforementioned determine-whether-to-select instructions that contain said particular specific-WSW information and said please-fully-enable-WSW-on-CC13-at-particu

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				lar-8:30 information. Executing said determine-whether-to-select instructions causes microcomputer, 205, to... Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
	Column 19 lines 23-24.	Then, in a predetermined fashion, microcomputer, **205**, may ...	Page 439 lines 14-15.	...to receive the transmission of cable channel 13;...
			Page 437 lines 1-6.	Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW-on-CC13-at-particular- 8:30 information to the controller, 20. Receiving said please-fully-enable-WSW-on-CC13-at-particular-8:30 information causes controller, 20, in a predetermined fashion, to prepare particular apparatus ...
			Page 439 lines 9-15.	... to cause selected apparatus of said station--cable converter box, 201, ... to receive the transmission of cable channel 13; ...
responding to said	Column 19 line 60 to	At this point, an instruction signal is	Page 25 line 34 to page	At this point, an instruction signal is generated

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processor instruction to coordinate presentation of	column 20 line 1.	generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, **203**, and transferred via processor, **204**, to microcomputer, **205**.	26 line 2.	at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205;
			Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed to process said information automatically. Controller, 39, is preprogrammed to … correct errors in retained received information by means of forward error correction techniques well known in the art; to convert, as may be required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; … to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus.
		This signal instructs microcomputer, **205**, to transmit the first overlay to TV set, **202**, for as long as it receives the same instruction signal from processor, **204**.	Page 26 lines 4-11.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic. And microcomputer, 205, commences …
		The viewer then sees a microcomputer generated graphic of his own stocks' performance …		
said first and	Column 19 line 53-56.	Subsequently in the program, the host says, "Here is what the Dow Jones Industrials did is the past week," and a studio	Page 25 lines 26-33.	During this time the program may show the so-called "talking head" of the host as he describes the behavior of the stock market

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		generated graphic is pictured.		over the course of the week. Then the host says, "Now as we turn to the graphs, here is what the Dow Jones Industrials did in the week just past," and a studio generated graphic is transmitted. Fig. 1B shows the image of said graphic as it appears on the video screen of TV monitor, 202M.
said second media; and	Column 19 line 67 to column 20 line 1.	The viewer then sees a microcomputer generated graphic of his own stocks' performance …	Page 26 lines 8-11.	TV monitor, 202M, then displays … the microcomputer generated graphic of the subscriber's own portfolio performance …
outputting said multimedia presentation based on said step of responding.	Column 19 line 64 to column 20 line 2.	This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 26 lines 4-11.	… "GRAPHICS ON". Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
			Page 451 line 3.	And the Fig. 1C combining is displayed.

One Of				
21. The method of claim 20, wherein said receiver station includes a first selective transfer device and said outputting step comprises the step of	Column 19 lines 27-29.	…and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."	Page 445 line 24 to page 446 line 1.	… instructions causes controller, 20, to switch power on to monitor, 202M, and commence transferring the television output transmission of microcomputer, 205, to said monitor, 202M; … Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, and to tune monitor, 202M, in a predetermined fashion.

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			Page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio …
Or				
21. The method of claim 20, wherein said receiver station includes a first selective transfer device and said outputting step comprises the step of	Column 19 line 64 to column 20 line 1.	This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer generated graphic of his own stocks' performance …	Page 26 lines 4-10.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the …
controlling said first selective transfer device to transfer one of said first and	Column 19 lines 27-29.	…and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."	Page 445 line 24 to page 446 line 1.	… instructions causes controller, 20, to switch power on to monitor, 202M, and commence transferring the television output transmission of microcomputer, 205, to said monitor, 202M; … Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, and to tune monitor, 202M, in a predetermined fashion.
			Page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio …
second media to an output device.	Column 19 line 60 to column 20 line 1.	At this point, an instruction signal is generated in the television studio originating the programing and is	Page 25 line 34 to page 26 line 2.	At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and

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		transmitted in the programing transmission. This signal is identified by decoder, **203**, and transferred via processor, **204**, to microcomputer, **205**.		transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205;
			Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed to process said information automatically. Controller, 39, is preprogrammed to … correct errors in retained received information by means of forward error correction techniques well known in the art; to convert, as may be required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; … to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus.
		This signal instructs microcomputer, **205**, to transmit the first overlay to TV set, **202**, for as long as it receives the same instruction signal from processor, **204**. The viewer then sees a microcomputer generated graphic of his own stocks' performance …	Page 26 lines 4-11.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic. And microcomputer, 205, commences …
22. The method of claim 21, wherein said step of controlling	Column 19 line 60 to column 20 line 1.	At this point, an instruction signal is generated in the television studio originating the programing and is	Page 25 line 34 to page 26 line 2.	At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and

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comprises originating said second medium of said first and second media.		transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205. This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer generated graphic of his own stocks' performance …	Page 37 line 26 to page 38 line 8. Page 26 lines 4-11.	transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205; In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed to process said information automatically. Controller, 39, is preprogrammed to … correct errors in retained received information by means of forward error correction techniques well known in the art; to convert, as may be required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; … to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus. Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic. And microcomputer, 205, commences …
23. The method of claim 21, wherein said receiver station includes	Column 19 lines 23-27.	… microcomputer, 205, may instruct tuner, 214, to switch box, 201, to channel X and may instruct control system, 220, to turn	Page 437 lines 1-6.	Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW-

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a plurality of selective transfer devices, said method further comprising the step of causing a second of said plurality of selective transfer devices to store said first medium of said first and second media.		video recorder, **217**, on and record "Wall Street Week," ...		on-CC13-at-particular- 8:30 information to the controller, 20. Receiving said please-fully-enable-WSW-on-CC13-at- particular-8:30 information causes controller, 20, in a predetermined fashion, to prepare particular apparatus ...
			Page 439 lines 9-15.	... to cause selected apparatus of said station--cable converter box, 201, ... to receive the transmission of cable channel 13; ...
			Page 295 lines 6-8.	Then, automatically, controller, 20, causes a selected tuner, 214, to tune to the frequency of cable channel 13, thereby causing its associated convert box, 201, to convert its...
			Page 439 lines 9-15.	... to cause selected apparatus of said station--cable converter box, 201, ... to receive the transmission of cable channel 13; ...
			Page 445 lines 24-27.	... instructions causes controller, 20, ...; to switch power on to video recorder/player, 217,....
			Page 446 lines 18-23.	... controller, 20, ... causes recorder/player, 217, to record said information of the "Wall Street Week" program.
24. A method of outputting a multimedia presentation	Column 20 lines 12-15.	FIG **6D** illustrates one method for co-ordinating the presentation of information through the use of print with video. FIG **6D** also illustrates possible uses of a decrypter and a local input.	Page 469 lines 3-6.	Fig. 7F illustrates a method for generating and communicating information to selected subscribers through the coordination of computers, television, and broadcast print. Fig. 7F also illustrates use of a local input, 225.

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			Page 478 lines 1-5.	(Whichever transmission method is employed the information of said second message can be encrypted and caused to be decrypted in any of the methods described above—for example, in the method of the first message of example #4.)
at a receiver station, said method comprising the steps of:	Column 17 lines 47-53.	FIG **6** illustrates one possible configuration of equipment in a home or office or other television and/or radio receiving site. Consideration of FIGS. **6F** and **6G** is facilitated by consideration, first, of individual examples of the types of co-ordinated presentations that the signal apparatus and methods described here can permit.	Page 390 lines 30-35.	Fig. 7 exemplifies one embodiment of an ultimate receiver station; is a subscriber station in the field distribution system, 93, of the intermediate transmission station of Fig. 6; and may be a home, an office, a theater, a hotel, or any other station where programming such as television or radio is displayed to persons.
			Page 396 lines 8-10.	Features, benefits, and modes of operation of the station of Fig. 7 are demonstrated in the following individual examples.
receiving, at said receiver station, first	Column 20 lines 16-19.	Suppose a viewer watches a television program on cooking techniques that is received on TV set, **202**, via box, **201**. Julia Childs's "The French Chef" is one such program.	Page 470 lines 1-3 and	...transmits the programming transmission of a particular conventional television program on cooking techniques that is called "Exotic Meals of India."
			Page 470 lines 9-12.	At the station of Fig. 7 and 7F (which station is a subscriber station of the intermediate station of Fig. 6), in the fashions described above, apparatus is caused to receive the particular transmission of said program that is ...
			Page 470 lines 19-21.	... to display the television information of said transmission (that is, information of said audio and video) at monitor, 202M.
and second	Column 20 lines 46-47.	When the transmission of the recipe ...	Page 473 lines 3-13.	One minute later, said program originating studio embeds in the transmission of said "Exotic Meals of India" programming and transmits a particular second SPAM message that consists of ... **generate-recipe-**...

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	Column 20 lines 47.	[when the transmission] ... is received, box **222**, transfers the transmission ...	Page 477 lines 12-17.	instructions ... ...selected converter box, 222, to tune said box, 222, to receive said second transmission; to cause the matrix switch, 258, to ... link ... said selected converter box, 222, and said decoder, 290; ... said decoder, 290, to receive said transmission....
			Page 477 lines 23-29.	... causes ... said decoder, 290, to detect and process properly the information of said second message.
	Column 20 lines 47-48.	... to decrypter, 224, for decryption ...	Page 478 lines 1-5.	(Whichever transmission method is employed the information of said second message can be encrypted and caused to be decrypted in any of the methods described above--for example, in the method of the first message of example #4.)
media of said multimedia presentation from	Column 1 lines 6-8.	At the present time, vast amounts of programing are transmitted through various media throughout the United States....	Page 1 lines 27-28.	But television, radio, and broadcast print are only mass media.
at least two different sources,	Column 20 lines 16-19.	Suppose a viewer watches a television program on cooking techniques that is received on TV set, 202, via box, 201. Julia Childs's "The French Chef" is one such program.	Page 470 lines 1-3 and	..transmits the programming transmission of a particular conventional television program on cooking techniques that is called "Exotic Meals of India."
			Page 470 lines 9-12.	At the station of Fig. 7 and 7F (which station is a subscriber station of the intermediate station of Fig. 6), in the fashions described above, apparatus is caused to receive the particular transmission of said program that is ...
			Page 470 lines 19-21.	... to display the television information of said transmission (that is, information of said audio and video) at monitor, 202M.

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	Column 20 lines 47.	[when the transmission] … is received, box 222, transfers the transmission …	Page 477 lines 12-17.	…selected converter box, 222, to tune said box, 222, to receive said second transmission; to cause the matrix switch, 258, to … link … said selected converter box, 222, and said decoder, 290; … said decoder, 290, to receive said transmission….
			Page 477 lines 23-29.	… causes … said decoder, 290, to detect and process properly the information of said second message.
only one of said first and second media containing television programming,	Column 20 lines 16-19.	Suppose a viewer watches a television program on cooking techniques that is received on TV set, 202, via box, 201. Julia Childs's "The French Chef" is one such program.	Page 470 lines 1-3 and	…transmits the programming transmission of a particular conventional television program on cooking techniques that is called "Exotic Meals of India."
			Page 470 lines 9-12.	At the station of Fig. 7 and 7F (which station is a subscriber station of the intermediate station of Fig. 6), in the fashions described above, apparatus is caused to receive the particular transmission of said program that is …
			Page 470 lines 19-21.	… to display the television information of said transmission (that is, information of said audio and video) at monitor, 202M.
	Column 20 lines 48-49.	… and thence to printer, 221, for printing.	Page 475 lines 1-2.	Receiving said output information causes printer, 221, to print the information of said specific recipe and list.
said television programming including audio and video;	Column 20 lines 16-23.	Suppose a viewer watches a television program on cooking techniques that is received on TV set, 202, via box, 201. Julia Childs's "The French Chef" is one such program. Halfway through the program, the host says, "If you are interested in cooking what we are preparing here and want a printed copy of the recipe for a charge of only 10 cents, press 567 on your Widget Signal	Page 470 lines 1-3 and	…transmits the programming transmission of a particular conventional television program on cooking techniques that is called "Exotic Meals of India."
			Page 470 lines 9-13.	At the station of Fig. 7 and 7F (which station is a subscriber station of the intermediate station of Fig. 6), in the fashions described above, apparatus is caused to receive the particular transmission of said program that is

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		Generator and Local Input."		retransmitted by the intermediate station of Fig. 6; ...
			Page 470 lines 19-21.	... to display the television information of said transmission (that is, information of said audio and video) at monitor, 202M.
			Page 471 lines 6-13.	Halfway through the program the host says, "If you are interested in cooking what we are preparing here and want a your own printed copy of the recipe tailored to your own tastes and your own shopping list for a charge of only 10 cents, enter on your Widget Signal Generator and Local Input the information that you see on your screen." The information that appears on the screen of each subscriber is "TV567#".
receiving, from a remote transmitter station,	Column 20 lines 16-19.	Suppose a viewer watches a television program on cooking techniques that is received on TV set, 202, via box, 201. Julia Childs's "The French Chef" is one such program.	Page 470 lines 1-3 and	...transmits the programming transmission of a particular conventional television program on cooking techniques that is called "Exotic Meals of India."
			Page 470 lines 9-12.	At the station of Fig. 7 and 7F (which station is a subscriber station of the intermediate station of Fig. 6), in the fashions described above, apparatus is caused to receive the particular transmission of said program that is ...
			Page 470 lines 19-21.	... to display the television information of said transmission (that is, information of said audio and video) at monitor, 202M.
	Column 18 lines 48-51.	Several separate news services transmit news on different channels carried on the multi- channel cable transmission to converter boxes, 222 and 201, and to signal processor, 200.	Page 420 lines 21-29.	Two remote stations--remote news-service-A station and remote news-service-B station--transmit, from geographically separate locations, two different broadcast print transmissions. The intermediate transmission station of Fig. 6 receives and retransmits information the

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	For example Column 10 lines 24-28.	FIGS. 3A, 3B and 3C illustrates one instance of such use. FIGS. 3A, 3B, and 3C illustrate the use of Signal Processing Apparatus and Methods at a cable television system "head end" transmission facility that cablecasts several channels of television programing.	For example Page 324 lines 18-21.	transmissions of said remote stations on digital data channels A and B, respectively, that are inputed to converter boxes, 222 and 201, and to signal processor, 200. Fig. 6 illustrates Signal Processing Apparatus and Methods at an intermediate transmission station that is a cable television system "head end" and that cablecasts several channels of television programming.
a control signal at said receiver station;	Column 20 lines 27- 31.	Five minutes later, a signal is identified in the incoming programing on TV set, 202, by decoder, 203, which is also transferred by processor, 204, to buffer/comparator, 8, of signal processor, 200. This signal instructs buffer/comparator, 8, that, if 567 ...	Page 471 line 26 to page 472 line 17.	Five minutes later, said program originating studio embeds in the transmission of the "Exotic Meals of India" programming and transmits a particular first SPAM message that consists of ... check-for-entered-information-and-process instructions, ... At the station of Figs. 7 and 7F, said message is detected at TV signal decoder, 145, and said execution segment information invokes particular controlled function instructions that cause said message to be transferred to the controller, 20, of signal processor, 200. .... Receiving said message causes controller, 20, to load and execute said check-for-entered-information-and-process instructions, and executing said instructions causes controller, 20, to determine that TV567# information exists at said last-local-input-# memory ....
identifying content, at said receiver station, of said first medium of said multimedia presentation based on said control signal;	Column 20 lines 31.	This signal instructs buffer/comparator, 8, ...	Page 472 lines 13-15.	Receiving said message causes controller, 20, to load and execute said check-for-entered-information-and-process instructions, ...

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	Column 20 lines 31-33.	... that, if 567 has been received from signal generator, **225**, signal processor, **200**, should, in a predetermined fashion, ...	Page 472 lines 15-17.	... and executing said instructions causes controller, 20, to determine that TV567# information exists at said last-local-input-# memory ...
	Column 20 lines 19-23.	Halfway through the program, the host says, "If you are interested in cooking what we are preparing here and want a printed copy of the recipe for a charge of only 10 cents, press 567 on your Widget Signal Generator and Local Input."	Page 471 lines 6-13.	Halfway through the program the host says, "If you are interested in cooking what we are preparing here and want a your own printed copy of the recipe tailored to your own tastes and your own shopping list for a charge of only 10 cents, enter on your Widget Signal Generator and Local Input the information that you see on your screen." The information that appears on the screen of each subscriber is "TV567#".
coordinating presentation,	*In general* Column 20 lines 12-15.	FIG **6D** illustrates one method for co-ordinating the presentation of information through the use of print with video. FIG **6D** also illustrates possible uses of a decrypter and a local input.	*In general* Page 469 lines 3-6.	Fig. 7F illustrates a method for generating and communicating information to selected subscribers through the coordination of computers, television, and broadcast print. Fig. 7F also illustrates use of a local input, 225.
			Page 478 lines 1-5.	(Whichever transmission method is employed the information of said second message can be encrypted and caused to be decrypted in any of the methods described above—for example, in the method of the first message of example #4.)
	Specifically Column 20 lines 31.	This signal instructs buffer/comparator, 8, ...	*Specifically* Page 472 lines 13-15.	Receiving said message causes controller, 20, to load and execute said check-for-entered-information-and-process instructions, ...
	Column 20 lines 31-33.	... that, if 567 has been received from signal generator, 225, signal processor, 200, should, in a predetermined fashion, ...	Page 472 lines 15-17.	... and executing said instructions causes controller, 20, to determine that TV567# information exists at said last-local-input-# memory ...
	Column 20 lines 36-37.	... and instruct control means, 226, to	Page 474 lines 3-7.	...instructions causes microcomputer, 205, to

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		activate printer, 221.		generate information of the specific fish curry recipe and fish curry shopping list of the family of the subscriber of the station of Figs. 7 and 7F; to cause said recipe and shopping list to be printed at printer, 221....
based on said step of identifying, of	Column 20 lines 27- 31.	Five minutes later, a signal is identified in the incoming programing on TV set, **202**, by decoder, **203**, which is also transferred by processor, **204**, to buffer/comparator, **8**, of signal processor, **200**. This signal instructs buffer/comparator, **8**, that, if 567 ...	Page 471 line 26 to page 472 line 17.	Five minutes later, said program originating studio embeds in the transmission of the "Exotic Meals of India" programming and transmits a particular first SPAM message that consists of ... check-for-entered-information-and-process instructions, ... At the station of Figs. 7 and 7F, said message is detected at TV signal decoder, 145, and said execution segment information invokes particular controlled function instructions that cause said message to be transferred to the controller, 20, of signal processor, 200. .... Receiving said message causes controller, 20, to load and execute said check-for-entered-information-and-process instructions, and executing said instructions causes controller, 20, to determine that TV567# information exists at said last-local-input-# memory ...
said first medium of said multimedia presentation with	Column 20 lines 16-23.	Suppose a viewer watches a television program on cooking techniques that is received on TV set, **202**, via box, **201**. Julia Childs's "The French Chef" is one such program. Halfway through the program, the host says, "If you are interested in cooking what we are preparing here and want a printed copy of the recipe for a charge of only 10 cents, press 567 on your Widget Signal Generator and Local Input."	Page 470 lines 1-3 and	...transmits the programming transmission of a particular conventional television program on cooking techniques that is called "Exotic Meals of India."
			Page 470 lines 9-13.	At the station of Fig. 7 and 7F (which station is a subscriber station of the intermediate station of Fig. 6), in the fashions described above, apparatus is caused to receive the particular transmission of said program that is retransmitted by the intermediate station of Fig. 6; ...
			Page 470 lines 19-21.	... to display the television information of said

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			Page 471 lines 6-13.	transmission (that is, information of said audio and video) at monitor, 202M. Halfway through the program the host says, "If you are interested in cooking what we are preparing here and want a your own printed copy of the recipe tailored to your own tastes and your own shopping list for a charge of only 10 cents, enter on your Widget Signal Generator and Local Input the information that you see on your screen." The information that appears on the screen of each subscriber is "TV567#".
presentation of said second medium of said multimedia presentation; and	Column 20 lines 36-37.	... and instruct control means, 226, to activate printer, 221.	Page 474 lines 3-7.	...instructions causes microcomputer, 205, to generate information of the specific fish curry recipe and fish curry shopping list of the family of the subscriber of the station of Figs. 7 and 7F; to cause said recipe and shopping list to be printed at printer, 221....
outputting said first medium of said multimedia presentation at a first output device at said receiver station, and	Column 20 lines 16-19.	Suppose a viewer watches a television program on cooking techniques that is received on TV set, 202, via box, 201. Julia Childs's "The French Chef" is one such program.	Page 470 lines 1-3 and	...transmits the programming transmission of a particular conventional television program on cooking techniques that is called "Exotic Meals of India."
			Page 470 lines 9-12.	At the station of Fig. 7 and 7F (which station is a subscriber station of the intermediate station of Fig. 6), in the fashions described above, apparatus is caused to receive the particular transmission of said program that is ...
			Page 470 lines 19-21.	... to display the television information of said transmission (that is, information of said audio and video) at monitor, 202M.
said second medium at a second output device at said receiver station.	Column 20 lines 46-49.	When the transmission of the recipe is received, box 222, transfers the transmission to decrypter, 224, for decryption and thence to printer, 221, for	Page 473 lines 3-13.	One minute later, said program originating studio embeds in the transmission of said "Exotic Meals of India" programming and transmits a particular second SPAM message

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		printing.		that consists of … **generate-recipe-**… instructions … .
			Page 477 lines 12-17.	… selected converter box, 222, to tune said box, 222, to receive said second transmission; to cause the matrix switch, 258, to … link … said selected converter box, 222, and said decoder, 290; … said decoder, 290, to receive said transmission…..
			Page 477 lines 23-29.	… causes … said decoder, 290, to detect and process properly the information of said second message.
			Page 478 lines 1-5.	(Whichever transmission method is employed the information of said second message can be encrypted and caused to be decrypted in any of the methods described above--for example, in the method of the first message of example #4.)
			Page 475 lines 1-2.	Receiving said output information causes printer, 221, to print the information of said specific recipe and list.
25. The method of claim 24, wherein said at least two different sources include a plurality of different local sources, and wherein said first and second output devices comprise	Column 20 lines 16-19.	Suppose a viewer watches a television program on cooking techniques that is received on TV set, 202, via box, 201. Julia Childs's "The French Chef" is one such program.	Page 470 lines 1-3 and	…transmits the programming transmission of a particular conventional television program on cooking techniques that is called "Exotic Meals of India."
			Page 470 lines 9-12.	At the station of Fig. 7 and 7F (which station is a subscriber station of the intermediate station of Fig. 6), in the fashions described above, apparatus is caused to receive the particular transmission of said program that is …
			Page 470 lines 19-21.	… to display the television information of said transmission (that is, information of said audio

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				and video) at monitor, 202M.
	Column 20 lines 47.	[when the transmission] ... is received, box 222, transfers the transmission ...	Page 477 lines 12-17.	...selected converter box, 222, to tune said box, 222, to receive said second transmission; to cause the matrix switch, 258, to ... link ... said selected converter box, 222, and said decoder, 290; ... said decoder, 290, to receive said transmission....
			Page 477 lines 23-29.	... causes ... said decoder, 290, to detect and process properly the information of said second message.
a speaker and	Column 20 lines 19-23.	Halfway through the program, the host says, "If you are interested in cooking what we are preparing here and want a printed copy of the recipe for a charge of only 10 cents, press 567 on your Widget Signal Generator and Local Input."	Page 471 lines 6-13.	Halfway through the program the host says, "If you are interested in cooking what we are preparing here and want a your own printed copy of the recipe tailored to your own tastes and your own shopping list for a charge of only 10 cents, enter on your Widget Signal Generator and Local Input the information that you see on your screen." The information that appears on the screen of each subscriber is "TV567#".
26. A method of outputting a multimedia presentation	Column 19 line 64 to column 20 line 2.	This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 26 lines 4-11.	... "GRAPHICS ON". Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
			Page 451 line 3.	And the Fig. 1C combining is displayed.
	Column 19 lines 31-34.	FIG 6C can also illustrate how programing	Page 18 lines 24-27.	Fig. 7C is a block diagram of signal

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	delivered at different times to one place can be co-ordinated to give a multimedia presentation at one time in one place.				processing apparatus and methods selecting receivable information and programming and controlling combined medium, multi-channel presentations. (To accomplish all this has required only that the subscriber of microcomputer, 205, [and other subscribers at other stations] cause the installation and connection of the apparatus shown in the figures of this submission, especially Fig. 7 (and 7C); caused his microcomputer, 205, to be preprogrammed as described above; and preinformed microcomputer, 205, of his wish to view said "Wall Street Week" program by causing the aforementioned select-WSW information to be recorded at said microcomputer, 205.) Then the combined medium combining process described above in "One Combined Medium" and in examples #1, #2, #3, #4, etc. commences. And the Fig. 1C combining is displayed.
				page 450 line 27 to page 451 line 11.	But the combining of Fig. 1C is just part of a larger process. When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, the program instruction set in the first message of the "Wall Street Week" example instructs microcomputer, 205, to generate not one but a plurality overlays. The combining of Fig. 1C is merely the first.
at a receiver station adapted to		Column 17 lines 47-53.	FIG **6** illustrates one possible configuration of equipment in a home or office or other television and/or radio receiving site. Consideration of FIGS. **6F** and **6G** is facilitated by consideration, first, of individual examples of the types of co-ordinated presentations that the signal apparatus and methods described here can permit.	Page 390 lines 30-35. Page 396 lines 8-10.	Fig. 7 exemplifies one embodiment of an ultimate receiver station; is a subscriber station in the field distribution system, 93, of the intermediate transmission station of Fig. 6; and may be a home, an office, a theater, a hotel, or any other station where programming such as television or radio is displayed to persons.

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				Features, benefits, and modes of operation of the station of Fig. 7 are demonstrated in the following individual examples.
receive a plurality of	Column 19 lines 27-29.	…and also microcomputer, **205**, may instruct switch, **216**, to turn TV set, **202**, on and tuner, **215**, to tune appropriately to "Wall Street Week."	Page 445 line 24 to page 446 line 1.	… instructions causes controller, 20, to switch power on to monitor, 202M, and commence transferring the television output transmission of microcomputer, 205, to said monitor, 202M; … Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, and to tune monitor, 202M, in a predetermined fashion.
			Page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio …
	Column 19 lines 35-37.	Each weekday, microcomputer, **205**, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day.	Page 449 lines 13-26.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.)

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media and	Column 1 lines 6-8.	At the present time, vast amounts of programing are transmitted through various media throughout the United States.…	Page 1 lines 27-28.	But television, radio, and broadcast print are only mass media.
	In general, Column 3 lines 48-56.	Another method has application at receiver sites such as private homes or public places like theaters, hotels, brokerage offices, etc., whether commercial establishments or not. This method provides techniques whereby, automatically, single channel, single medium presentations, be they television, radio, or other electronic transmissions, may be recorded, co-ordinated in time with other programing previously transmitted and recorded, or processed in other fashions.	In general, Page 86 lines 12-14.	(Hereinafter, the preferred normal location for transmitting signals in any given communication medium is called, the "normal transmission location".)
			For example, see "One Digital Data Channel,"	[See Fig. 7C]
	For example, see "One Digital Data Ch."	[See Fig. 6C.]	or, Page 85 lines 33-35.	In broadcast print or data communications, the preferred normal transmission location for SPAM signals is in the same location as the conventional information.
process at least one of said plurality of media, said method comprising the steps of:	Column 19 lines 35-41.	Each weekday, microcomputer, **205**, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.	Page 449 lines 13-35.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.) Alternatively, microcomputer, 205, is caused in a predetermined fashion (for example, by a

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				SPAM message a given transmission monitored by signal processor, 200, in any of the above described fashions) automatically to telephone a remote data service computer, by means of network, 262, in a fashion well known in the art, and to cause said remote computer to select and transmit the particular closing price datum or data of the stock or stocks of the portfolio of said microcomputer, 205, thereby causing said microcomputer, 205, to record said datum or data in a predetermined fashion.
receiving, at said receiver station, at least two of said plurality of	Column 9 lines 53-55.	The local oscillator, being thus sequenced, will allow each signal decoder, 30 and 40, to receive a particular frequency at a particular time interval.	Page 257 line 24 to page 258 line 19.	Said detection-complete information causes controller, 20, to cause oscillator, 6, to cause the selection of the next channel in the predetermined television channel selection pattern: wireless channel 9. Automatically oscillator, 6, causes mixer, 3, to select the frequency of channel 9 and input said frequency of interest, at a fixed frequency, to decoder, 30....

Controller, 20, has capacity for keeping track of elapsed time, and after determining in a predetermined fashion that a particular predetermined period of time has elapsed from the input of wireless channel 9 to decoder, 30, controller, 20, ... causes oscillator, 6, to cause the selection of the next channel in the predetermined television channel selection pattern: wireless channel 13. |
| | | | Page 265 line 27 to Page 266 line 21. | Said radio-detection-complete information causes ... controller, 20, to cause oscillator, 6, to cause the selection of the next frequency in the predetermined radio frequency selection pattern: 99.0 MHz. Automatically oscillator, 6, causes mixer, 2, to select said frequency and input it, at a fixed frequency, to decoder, 40....

After determining, in a predetermined |

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				fashion, that a particular predetermined period of time has elapsed from the input of said 99.0 MHz frequency to decoder, 40, controller, 20, ... causes oscillator, 6, to cause the selection of the next frequency in the predetermined radio frequency selection pattern: 100.0 MHz.
	Column 19 lines 35-37.	Each weekday, microcomputer, **205**, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day.	Page 449 lines 13-26.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.)
	Column 19 lines 27-29.	...and also microcomputer, **205**, may instruct switch, **216**, to turn TV set, **202**, on and tuner, **215**, to tune appropriately to "Wall Street Week."	Page 443 lines 19-24, and	Executing said additional 2nd-stage-enable-WSW-program instructions at the station of Fig. 7 causes controller, 20, first to cause the apparatus of said station to commence transferring the decrypted television information of the "Wall Street Week" program transmission to decoder, 203, and microcomputer, 205.
			page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio ....

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media	Column 1 lines 6-8.	At the present time, vast amounts of programing are transmitted through various media throughout the United States.…	Page 1 lines 27-28.	But television, radio, and broadcast print are only mass media.
	In general, Column 3 lines 48-56.	Another method has application at receiver sites such as private homes or public places like theaters, hotels, brokerage offices, etc., whether commercial establishments or not. This method provides techniques whereby, automatically, single channel, single medium presentations, be they television, radio, or other electronic transmissions, may be recorded, co-ordinated in time with other programing previously transmitted and recorded, or processed in other fashions.	In general, Page 86 lines 12-14.	(Hereinafter, the preferred normal location for transmitting signals in any given communication medium is called, the "normal transmission location".)
			For example, see "One Digital Data Channel,"	[See Fig. 7C]
	For example, see "One Digital Data Ch."	[See Fig. 6C.]	or, Page 85 lines 33-35.	In broadcast print or data communications, the preferred normal transmission location for SPAM signals is in the same location as the conventional information.
from different sources,	*For example* Column 19 lines 27-29.	…and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."	*For example* Page 445 line 24 to page 446 line 1.	… instructions causes controller, 20, to switch power on to monitor, 202M, and commence transferring the television output transmission of microcomputer, 205, to said monitor, 202M; … Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, and to tune monitor, 202M, in a predetermined fashion.
			Page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio …
	Column 19 lines 35-37.	Each weekday, microcomputer, 205,	Page 449 lines 13-26.	Each weekday after 4:30 PM, a remote

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		receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day.		stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.)
at least one of said different sources being a remote transmitter station;	Column 19 lines 60-63.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission.	Page 59 lines 29-33.	A SPAM message is the modality whereby the original transmission station that originates said message controls specific addressed apparatus at subscriber stations. The information of any given SPAM transmission consists of a series or stream of sequentially transmitted SPAM messages.
			Page 25 line 34 to page 26 line 1.	At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted.
			Page 90 lines 4-7. Applicants teach this as the composition of the instruction signal of page 25 line 34. See page 26 lines 1-4 and page 89 lines 3-6, and page 90 lines 4-11.	The second message is of the information associated with the second combining synch command. Said second command has a "00" header, an execution segment, and a meter-monitor …

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processing said at least two of said plurality of media	Column 19 lines 17-20.	... processor or monitor, **12**, which reacts, in a predetermined fashion by passing also externally to microcomputer, **205**, all signals that it passes to buffer/ comparator, **14**.	Page 288 lines 16-20.	... microcomputer, 205, may also automatically substitute for local control, 225, in predetermined fashions in inputting control information to said controller, 20, on the basis of preprogrammed instructions and information previously inputted to said microcomputer, 205.
			Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, ...
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st-and 3rd-new- program-message (#5) and the 1st-new- radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 435 lines 16-25 from example #5.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, of the station of Fig. 7 and 7C detects one instance of the Select-WSW-Program-Unit SPAM message of the station of Fig. 6 .... Receiving said Select-WSW-Program-Unit message causes the apparatus of said signal processor, 200, to input said message to the microcomputer, 205, of said station.
	Column 19 lines 35-41.	Each weekday, microcomputer, **205**, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may	Page 449 lines 13-35.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined

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		automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.		fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.) Alternatively, microcomputer, 205, is caused in a predetermined fashion (for example, by a SPAM message a given transmission monitored by signal processor, 200, in any of the above described fashions) automatically to telephone a remote data service computer, by means of network, 262, in a fashion well known in the art, and to cause said remote computer to select and transmit the particular closing price datum or data of the stock or stocks of the portfolio of said microcomputer, 205, thereby causing said microcomputer, 205, to record said datum or data in a predetermined fashion.
in order to output said multimedia presentation;	Column 19 lines 20-29.	Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 436 line 9 to page 437 line 6.	Receiving said Select-WSW-Program-Unit message causes decoder, 203, ... to input ... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputted is the aforementioned determine-whether-to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on-CC13 .... Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW

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				information, which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted. Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance.
		Then, in a predetermined fashion, microcomputer, 205, may		Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20. Receiving said please-fully-enable-WSW-on-CC13-at- particular-8:30 information causes controller, 20, in a predetermined fashion, to prepare particular apparatus ….
			Page 439 lines 9-15.	…to cause selected apparatus of said station--cable converter box, 201, … to receive the transmission of cable channel 13; …
		instruct tuner, 214, to switch box, 201, to channel X	Page 295 lines 6-8.	Then, automatically, controller, 20, causes a selected tuner, 214, to tune to the frequency of cable channel 13, thereby causing its associated converter box, 201, to convert its
		and may instruct control system, 220, to turn video recorder, 217, on and record "Wall Street Week,"	Page 445 lines 24-27.	…
			Page 446 lines 18-23.	…instructions causes controller, 20, …; to switch power on to video recorder/player, 217, …
		and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on	Page 445 line 24 to page 446 line 1.	…controller, 20, … causes recorder/player, 217, to record said information of the "Wall Street Week" program. …instructions causes controller, 20, to switch power on to monitor, 202M, …. Automatically, controller, 20, inputs a particular instruction to

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		and tuner, 215, to tune appropriately to "Wall Street Week."	Page 445 line 35 to page 446 line 1.	decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, ….
			Page 446 lines 17-21.	…and to tune monitor, 202M, in a predetermined fashion.
				In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio …
	Column 19 lines 60 to page 20 line 2.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205. This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 25 line 34 to page 26 line 2.	At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205; …
			Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed … to correct errors …. by means of forward error correction techniques well known in the art; to convert, as may be required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; … to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus
			Page 26 lines 4-11.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic

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			Page 451 line 3.	information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic. And the Fig. 1C combining is displayed.
identifying content of a first and	Column 19 lines 20-23.	Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new-program-message (#5) and the 1st-new-radio-program- message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 435 lines 16-25.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, of the station of Fig. 7 and 7C detects one instance of the Select-WSW-Program-Unit SPAM message of the station of Fig. 6 … Receiving said Select-WSW-Program-Unit message causes the apparatus of said signal processor, 200, to input said message to the microcomputer, 205, of said station.
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program-Unit message causes decoder, 203, … to input … the information segment of said message to the CPU of microcomputer, 205, and to cause said CPU to execute the information so inputted as a machine language job. The information so

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				inputted is the aforementioned determine-whether-to-select instructions that contain said particular specific-WSW information and said please-fully-enable-WSW-on-CC13-at-particular-8:30 information. Executing said determine-whether-to-select instructions causes microcomputer, 205, to…. Said instructions contain one instance, and … program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	…to receive the transmission of cable channel 13;…
content of a second of said at least two of said plurality of media	Column 18 lines 52-55.	The news services preceed each news transmission with a unique signal that uniquely identifies the company or companies to which the news item refers and/or the industries.	Page 420 line 32 to page 421 line 17.	Each remote station transmits each particular news item within the particular format of a Transmit-News-Item SPAM message, and receiving any given message in a Transmit-News-Item SPAM message … In due course, said remote news-service-A station transmits a particular AT&T news item in a particular Transmit-AT&T-News-Item message that is in said Transmit- News-Item SPAM message format and that consists of … the "program unit identification code"

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				information of said AT&T news item and subject matter information of said binary information of "T", appropriate padding bits, an information segment that contains **said AT&T news item,** and an end of file signal.
	Column 18 lines 46-48.	... microprocessor, 205, is programed to hold a portfolio of stocks and to receive news about these particular stocks and about the industries they are in.	Page 420 lines 3-6.	The microprocessor, 205, of the station of Fig. 7 and 7C, is preprogrammed to hold records of a portfolio of stocks and to receive and process automatically news items about said stocks and about the industries of said stocks.
	Column 19 lines 39-41.	[Microcomputer, 205,] records those prices that **relate** to the stocks in its stored portfolio.	Page 449 lines 13-20.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer.
based on said step of processing;	Column 19 lines 17-23.	... processor or monitor, **12,** which reacts, in a predetermined fashion by passing also externally to microcomputer, **205,** all signals that it passes to buffer/ comparator, **14.** Analyzing these identifier signals in a predetermined fashion, microcomputer, **205,** determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, ...
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)

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			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, ... to input ... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on- CC13.... Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	... to receive the transmission of cable channel 13; ...
	Column 19 lines 35-41.	Each weekday, microcomputer, **205,** receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.	Page 449 lines 13-35.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer.

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				(Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.) Alternatively, microcomputer, 205, is caused in a predetermined fashion (for example, by a SPAM message a given transmission monitored by signal processor, 200, in any of the above described fashions) automatically to telephone a remote data service computer, by means of network, 262, in a fashion well known in the art, and to cause said remote computer to select and transmit the particular closing price datum or data of the stock or stocks of the portfolio of said microcomputer, 205, thereby causing said microcomputer, 205, to record said datum or data in a predetermined fashion.
outputting said multimedia presentation based on said step of identifying,	Column 19 lines 20-29.	Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 436 line 9 to page 437 line 6.	Receiving said Select-WSW-Program-Unit message causes decoder, 203, … to input … the information segment of said message to the CPU of microcomputer, 205, … The information so inputted is the aforementioned determine-whether-to-select instructions that contain said particular specific-WSW information and said … enable-WSW-on-CC13 …. Said instructions contain one instance, and … program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares

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				said one instance to said program-unit-of-interest information and **determines a match** with said second instance.
		Then, in a predetermined fashion, microcomputer, 205, may		Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
				Receiving said please-fully-enable-WSW-on-CC13-at- particular-8:30 information causes controller, 20, in a predetermined fashion, to prepare particular apparatus ...
			Page 439 lines 9-15.	...to cause selected apparatus of said station--cable converter box, 201, ... to receive the transmission of cable channel 13;
				...
		instruct tuner, 214, to switch box, 201, to channel X	Page 295 lines 6-8.	Then, automatically, controller, 20, causes a selected tuner, 214, to tune to the frequency of cable channel 13, thereby causing its associated convert box, 201, to convert its
				...
		and may instruct control system, 220, to turn video recorder, 217, on and record "Wall Street Week,"	Page 445 lines 24-27.	...instructions causes controller, 20, ...; to switch power on to video recorder/player, 217,
			Page 446 lines 18-23.	...
		and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on	Page 445 line 24 to page 446 line 1.	...controller, 20, ... causes recorder/player, 217, to record said information of the "Wall Street Week" program.
				...instructions causes controller, 20, to switch power on to monitor, 202M, ... Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, ...
		and tuner, 215, to tune appropriately to "Wall Street Week."	Page 445 line 35 to page 446 line 1.	...and to tune monitor, 202M, in a

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			Page 446 lines 17-21.	predetermined fashion.
				In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio …
	Column 19 lines 60 to page 20 line 2.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205. This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 25 line 34 to page 26 line 2.	At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205; …
			Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed … to correct errors … by means of forward error correction techniques well known in the art; to convert, as may be required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; … to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus
			Page 26 lines 4-11.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is

Claim Language of Instant Application	Applicants' Priority U.S. Pat. No. '490 Reference	Applicants' Priority U.S. Pat. No. '490 Language	Instant Specification Reference	Instant Specification Language
said multimedia presentation comprising one of a sequential	Column 19 lines 59-60. Column 19 line 67 to column 20 line 1.	Then the host says, "And here is what your portfolio did." The viewer then sees a microcomputer generated graphic of his own stocks' performance ...	Page 451 line 3. Page 25 lines 33-34. Page 26 lines 8-11.	the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic. And the Fig. 1C combining is displayed. Then the host says, "And here is what your portfolio did." TV monitor, 202M, then displays ... the microcomputer generated graphic of the subscriber's own portfolio performance ...
and a simultaneous presentation of	Column 19 lines 67 to column 20 line 2.	The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 451 line 3. Page 26 lines 8-11.	And the Fig. 1C combining is displayed. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
information based on said first of said at least two of said plurality of media and	Column 19 lines 27-29. Column 19 line 53-56.	...and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week." Subsequently in the program, the host says, "Here is what the Dow Jones Industrials	Page 445 line 24 to page 446 line 1. Page 446 lines 17-21. Page 25 lines 26-33.	... instructions causes controller, 20, to switch power on to monitor, 202M, and commence transferring the television output transmission of microcomputer, 205, to said monitor, 202M; ... Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, and to tune monitor, 202M, in a predetermined fashion. In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio ... During this time the program may show the so-called "talking head" of the host as he

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		did is the past week," and a studio generated graphic is pictured.		describes the behavior of the stock market over the course of the week. Then the host says, "Now as we turn to the graphs, here is what the Dow Jones Industrials did in the week just past," and a studio generated graphic is transmitted. Fig. 1B shows the image of said graphic as it appears on the video screen of TV monitor, 202M.
	Column 19 lines 59-60.	Then the host says, "And here is what your portfolio did."	Page 25 lines 33-34.	Then the host says, "And here is what your portfolio did."
information based on said second of said at least two of said plurality of media.	Column 19 line 67 to column 20 line 1.	The viewer then sees a microcomputer generated graphic of his own stocks' performance ...	Page 26 lines 8-11.	TV monitor, 202M, then displays ... the microcomputer generated graphic of the subscriber's own portfolio performance ...
	Column 19 lines 39-41.	[Microcomputer, 205,] records those prices that relate to the stocks in its stored portfolio.	Page 449 lines 13-20.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer.
27. The method of claim 26, wherein said receiver station includes a storage device, said method further comprising the step of storing said at least two of said plurality of media at said receiver station.	Column 19 lines 20-27.	Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 436 line 9 to page 437 line 6.	Receiving said Select-WSW-Program-Unit message causes decoder, 203, ... to input ... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputted is the aforementioned determine-whether-to-select instructions that contain said particular specific-WSW information ... and said ... enable-WSW-on-CC13 ... Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said

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				microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or **record**) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and determines a match with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20. Receiving said please-fully-enable-WSW- on-CC13-at- particular-8:30 information causes controller, 20, ...
		Then, in a predetermined fashion, microcomputer, 205, may		
			Page 439 lines 9-15.	...to cause selected apparatus of said station--cable converter box, 201, ... to receive the transmission of cable channel 13; ...
			Page 439 lines 9-15	...to cause selected apparatus of said station--cable converter box, 201, ... to receive the transmission of cable channel 13; ...
		instruct tuner, 214, to switch box, 201, to channel X	Page 295 lines 6-8.	Then, automatically, controller, 20, causes a selected tuner, 214, to tune to the frequency of cable channel 13, thereby causing its associated converter box, 201, to convert its...
			Page 445 lines 24-27.	...instructions causes controller, 20, ...; to switch power on to video recorder/player, 217, ...
		and may instruct and may instruct control system, 220, to turn video recorder, 217, on and **record** "Wall Street Week,"	Page 446 lines 18-23.	...controller, 20, ... causes recorder/player, 217, to **record** said information of the "Wall

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	Column 19 lines 35-41.	Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It **records** those prices that relate to the stocks in its stored portfolio.	Page 449 lines 13-35.	Street Week" program. Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.) Alternatively, microcomputer, 205, is caused in a predetermined fashion (for example, by a SPAM message a given transmission monitored by signal processor, 200, in any of the above described fashions) automatically to telephone a remote data service computer, by means of network, 262, in a fashion well known in the art, and to cause said remote computer to select and transmit the particular closing price datum or data of the stock or stocks of the portfolio of said microcomputer, 205, thereby causing said microcomputer, 205, to record said datum or data in a predetermined fashion.
28. The method of claim 27, further comprising the step of originating a portion of	Column 19 line 64 to column 20 line 1.	This signal instructs microcomputer, **205,** to transmit the first overlay to TV set, **202,** for as long as it receives the same instruction signal from processor, **204.**	Page 26 lines 4-10.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and

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said multimedia presentation at said receiver station		The viewer then sees a microcomputer generated graphic of his own stocks' performance …		transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the …
	Column 19 lines 60 to page 20 line 2.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205. This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 442, lines 7-21.	Under control of their particular station-specific-alternate-handling instructions, selected others of said certain other stations cause apparatus of their specific stations to record the information of said transmission--albeit, the encrypted information--thereby enabling a subscriber at each of said specific stations individually and manually to so-called "play back" the recorded encrypted information of said transmission and input a pay-per-view-authorizing instruction to a controller, 20, at his specific station, thereby causing said controller, 20, and other apparatus of the station of said subscriber [under control of said controller, 20] at a delayed time to decrypt, process, and display the information of said transmission in the fashion of the apparatus of the station of Fig. 7
	Column 16 lines 32-47.	For example, a person might instruct video cassette recorder, 135, automatically to record the NBC Network Nightly News as broadcast over station WNBC in New York City. Recorder, 135, might receive the programing over Manhattan Cable TV channel 4 and record the programing from 7:00 PM to 7:30 PM on the evening of July 15, 1985. Each discrete bit of this information could be conveyed to recorder, 135, in a signal unit or units in the programing so received and recorded. Decoder, 136, would identify these signals and transfer them to signal processor, 130.		

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		Subsequently, the person might play the recorded programing on TV set, **132**, from 10:45 PM to 11:15 PM the same evening. This time, TV signal decoder, **31**, identifies the embedded signals and transfers them to signal processor, **131**.		
based on said step of storing.	Column 19 lines 39-41.	[Microcomputer, **205**,] records those prices that relate to the stocks in its stored portfolio.	Page 449 lines 13-20.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer.
29. A method of outputting a multimedia presentation	Column 19 line 64 to column 20 line 2.	This signal instructs microcomputer, **205**, to transmit the first overlay to TV set, **202**, for as long as it receives the same instruction signal from processor, **204**. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 26 lines 4-11.	... "GRAPHICS ON". Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
			Page 451 line 3.	And the Fig. 1C combining is displayed.
	Column 19 lines 31-34.	FIG **6C** can also illustrate how programing delivered at different times to one place can be co-ordinated to give a multimedia presentation at one time in one place.	Page 18 lines 24-27.	Fig. 7C is a block diagram of signal processing apparatus and methods selecting receivable information and programming and controlling combined medium, multi-channel presentations.
			page 450 line 27 to	(To accomplish all this has required only

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			page 451 line 11.	that the subscriber of microcomputer, 205, [and other subscribers at other stations] cause the installation and connection of the apparatus shown in the figures of this submission, especially Fig. 7 (and 7C); caused his microcomputer, 205, to be preprogrammed as described above; and preinformed microcomputer, 205, of his wish to view said "Wall Street Week" program by causing the aforementioned select-WSW information to be recorded at said microcomputer, 205.) Then the combined medium combining process described above in "One Combined Medium" and in examples #1, #2, #3, #4, etc. commences. And the Fig. 1C combining is displayed. But the combining of Fig. 1C is just part of a larger process. When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, the program instruction set in the first message of the "Wall Street Week" example instructs microcomputer, 205, to generate not one but a plurality overlays. The combining of Fig. 1C is merely the first.
at a receiver station having	Column 17 lines 47-53.	FIG 6 illustrates one possible configuration of equipment in a home or office or other television and/or radio receiving site. Consideration of FIGS. 6F and 6G is facilitated by consideration, first, of individual examples of the types of co-ordinated presentations that the signal apparatus and methods described here can permit.	Page 390 lines 30-35. Page 396 lines 8-10.	Fig. 7 exemplifies one embodiment of an ultimate receiver station; is a subscriber station in the field distribution system, 93, of the intermediate transmission station of Fig. 6; and may be a home, an office, a theater, a hotel, or any other station where programming such as television or radio is displayed to persons. Features, benefits, and modes of operation of the station of Fig. 7 are demonstrated in the following individual examples.
an output device, said method comprising the	Column 19 lines 27-29.	...and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on	Page 445 line 24 to page 446 line 1.	... instructions causes controller, 20, to switch power on to monitor, 202M, and commence

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steps of:		and tuner, **215**, to tune appropriately to "Wall Street Week."		transferring the television output transmission of microcomputer, 205, to said monitor, 202M; ... Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, and to tune monitor, 202M, in a predetermined fashion.
			Page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio ...
processing a first control signal at said receiver station that	Column 19 lines 45-53.	When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening,	Page 451 lines 6-7.	When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, ...
programs a processor to create a series of discrete video images;		several instruction signals are identified by decoder, **203**, and transferred to microcomputer, **205**.	Page 23 line 35 to page 24 line 4.	Subsequently, a second series of instructions is embedded and transmitted at said program originating studio. Said second series is detected and converted into usable digital signals by decoder, 203, and inputted to microcomputer, 205, in the same fashion as the first series.
			Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed ... to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus.
		These signals instruct microcomputer, **205**,	Page 24 lines 5-16.	Microcomputer, 205, evaluates the initial signal word or words which instruct it to load at RAM (from the input buffer to which

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			decoder, 203, inputs) and run the information of a particular set of instructions that follows said word or words just as the information of a file named FILE.EXE, recorded on the contained floppy disk, would be loaded at RAM (from the input buffer to which the disk drive of said disk inputs) and run were the command "FILE" entered from the console keyboard to the system level of the installed disk operating system. (Hereinafter, such a set of instructions that is loaded and run is called a "program instruction set."
	to generate several graphic video overlays,	Page 451 lines 7-11.	...the program instruction set in the first message of the "Wall Street Week" example instructs microcomputer, 205, to generate not one but a plurality overlays. The combining of Fig. 1C is merely the first.
	which microcomputer, 205, has the means to generate and transmit and TV set, 202, has the means to receive and display, and to	Page 19 line 29 to page 20 line 20.	Microcomputer, 205, is a conventional microcomputer system ... for generating computer graphic information; for receiving a composite video transmission; for combining said graphic information onto the video information of said transmission by graphic overlay techniques, well known in the art; and for outputting the resulting combined information to a TV monitor, 202M, in a composite video transmission. ... TV monitor, 202M, has capacity for receiving composite video and audio transmissions and for presenting a conventional television video image and audio sound.
	transmit these overlays to TV set, 202,	Page 26 lines 4-8.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M.

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		upon command.	Page 44 lines 14-17.	A command is an instance of signal information that is addressed to particular subscriber station apparatus and that causes said apparatus to perform a particular function or functions.
			Page 26 lines 20-28.	(Hereinafter, an instruction such as the above signal of "GRAPHICS ON" that causes subscriber station apparatus to execute a combining operation in synchronization is called a "combining synch command." Said initial signal word or words that preceded the above program instruction set provide another example of a combining synch command in that said word or words synchronized all subscriber station computers in commencing loading and running information for a particular combining.)
identifying content of a first medium,	Column 19 lines 20-23.	Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new-program-message (#5) and the 1st-new-radio-program- message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 435 lines 16-25.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, of the station of Fig. 7 and 7C detects one instance of the Select-WSW-Program-Unit SPAM message of the station of Fig. 6 … Receiving said Select-WSW-Program-Unit message causes the apparatus of said signal processor, 200, to input said message to the

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				microcomputer, 205, of said station.
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program-Unit message causes decoder, 203, ... to input ... the information segment of said message to the CPU of microcomputer, 205, and to cause said CPU to execute the information so inputted as a machine language job. The information so inputted is the aforementioned determine-whether-to-select instructions that contain said particular specific-WSW information and said please-fully-enable-WSW-on-CC13-at-particular-8:30 information.
				Executing said determine-whether-to-select instructions causes microcomputer, 205, to.... Said instructions contain one instance, and .... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance.
				Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	...to receive the transmission of cable channel 13;...
said first medium to be output	Column 19 lines 27-29.	...and also microcomputer, **205**, may instruct switch, **216**, to turn TV set, **202**, on and tuner, **215**, to tune appropriately to	Page 445 line 24 to page 446 line 1.	... instructions causes controller, **20**, to switch power on to monitor, **202M**, and commence transferring the television output transmission

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		"Wall Street Week."		of microcomputer, 205, to said monitor, 202M; ... Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, and to tune monitor, 202M, in a predetermined fashion.
			Page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio …
	Column 19 line 53-56.	Subsequently in the program, the host says, "Here is what the Dow Jones Industrials did is the past week," and a studio generated graphic is pictured.	Page 25 lines 26-33.	During this time the program may show the so-called "talking head" of the host as he describes the behavior of the stock market over the course of the week. Then the host says, "Now as we turn to the graphs, here is what the Dow Jones Industrials did in the week just past," and a studio generated graphic is transmitted. Fig. 1B shows the image of said graphic as it appears on the video screen of TV monitor, 202M.
in said multimedia presentation;	Column 19 lines 67 to column 20 line 2.	The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 451 line 3.	And the Fig. 1C combining is displayed.
			Page 26 lines 8-11.	TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
causing a video image of said series of discrete video images to be output	Column 19 lines 64-66.	This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202,….	Page 26 lines 1-8.	Said signal is identified by decoder, 203; transferred to microcomputer, 205; and executed by microcomputer, 205, at the system level as the statement, "GRAPHICS ON". Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto

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				the received composite video information and transmit the combined information to TV monitor, 202M.
based on said step of identifying; and	Column 19 lines 20-25.	Analyzing these identifier signals in a predetermined fashion, microcomputer, **205**, determines that "Wall Street Week" is being televised on channel X. Then, in a predetermined fashion, microcomputer, **205**, may instruct tuner, **214**, to switch box, **201**, to channel X …	Page 436 line 9 to page 437 line 6.	Receiving said Select-WSW-Program-Unit message causes decoder, 203, … to input … the information segment of said message to the CPU of microcomputer, 205, … The information so inputted is the aforementioned determine-whether-to-select instructions that contain said particular specific-WSW information and said … enable-WSW-on-CC13 …. Said instructions contain one instance, and … program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20. Receiving said please-fully-enable-WSW-on-CC13-at- particular-8:30 information causes controller, 20, in a predetermined fashion, to prepare particular apparatus …
			Page 439 lines 9-15.	…to cause selected apparatus of said station--cable converter box, 201, … to receive the transmission of cable channel 13; …

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				Page 295 lines 6-8.	Then, automatically, controller, 20, causes a selected tuner, 214, to tune to the frequency of cable channel 13, thereby causing its associated converter box, 201, to convert its…
				Page 439 lines 9-15.	…to cause selected apparatus of said station--cable converter box, 201, … to receive the transmission of cable channel 13; …
		Column 19 lines 27-29.	…and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."	Page 443 lines 19-24, and	Executing said additional 2nd-stage-enable-WSW-program instructions at the station of Fig. 7 causes controller, 20, first to cause the apparatus of said station to commence transferring the decrypted television information of the "Wall Street Week" program transmission to decoder, 203, and microcomputer, 205.
				page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio …
		Column 19 lines 60-66.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205. This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, …	Page 25 line 33 to page 26 line 2..	Then the host says, "And here is what your portfolio did." At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205; and executed …
				Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed to process said

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				information automatically. Controller, 39, is preprogrammed to … correct errors in retained received information by means of forward error correction techniques well known in the art; to convert, as may be required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; … to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus.
			Page 26 lines 4-8.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M.
combining said outputted video image into said multimedia presentation at said output device based on said step of causing to be output, said multimedia presentation comprising said first medium and said outputted video image of said series of discrete video images.	Column 19 line 64 to column 20 line 2.	This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 26 lines 4-11.	… "GRAPHICS ON". Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
			Page 451 line 3.	And the Fig. 1C combining is displayed.
30. The method of claim 29, wherein said step of identifying comprises processing	Column 19 lines 17-23.	… processor or monitor, 12, which reacts, in a predetermined fashion by passing also externally to microcomputer, 205, all signals that it passes to buffer/ comparator,	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, …

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an identifier, said method further comprising the step of		14. Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, ... to input ... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on- CC13... Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.

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			Page 439 lines 14-15.	... to receive the transmission of cable channel 13; ...
receiving said identifier from a remote	Column 9 lines 53-55.	The local oscillator, being thus sequenced, will allow each signal decoder, 30 and 40, to receive a particular frequency at a particular time interval.	Page 257 line 24 to page 258 line 19.	Said detection-complete information causes controller, 20, to cause oscillator, 6, to cause the selection of the next channel in the predetermined television channel selection pattern: wireless channel 9. Automatically oscillator, 6, causes mixer, 3, to select the frequency of channel 9 and input said frequency of interest, at a fixed frequency, to decoder, 30 ... Controller, 20, has capacity for keeping track of elapsed time, and after determining in a predetermined fashion that a particular predetermined period of time has elapsed from the input of wireless channel 9 to decoder, 30, controller, 20, ... causes oscillator, 6, to cause the selection of the next channel in the predetermined television channel selection pattern: wireless channel 13.
			Page 265 line 27 to Page 266 line 21.	Said radio-detection-complete information causes ... controller, 20, to cause oscillator, 6, to cause the selection of the next frequency in the predetermined radio frequency selection pattern: 99.0 MHz. Automatically oscillator, 6, causes mixer, 2, to select said frequency and input it, at a fixed frequency, to decoder, 40 ... After determining, in a predetermined fashion, that a particular predetermined period of time has elapsed from the input of said 99.0 MHz frequency to decoder, 40, controller, 20, ... causes oscillator, 6, to cause the selection of the next frequency in the predetermined radio frequency selection pattern: 100.0 MHz.
	Column 19 lines 14-15.	... pass all program and channel identifiers on all programing being cablecast on the multi-channel system.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, of the

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				station of Fig. 7 and 7C …
			Page 248 lines 22-26 from example #5.	Via a conventional multi- channel cable transmission, in a fashion well known in the art, four channels of conventional television programming and two conventional FM radio signals are inputted to a first alternate contact of switch, 1, and to mixer, 2.
			Page 250 lines 13-16 from example #5.	Example #5 begins with the embedding and transmitting, at the remote station that originates the "Wall Street Week" broadcast, of the first message of the "Wall Street Week" program …
			Page 252 lines 15-35 from example #5.	Then, in a predetermined fashion, control processor, 39J, determines that said first command contains subject matter meter-monitor information causing said control processor, 39J, to transmit a message that consists of … execution segment information that is addressed to microcomputer, 205, (and that causes microcomputer, 205, to process the information of the meter- monitor segment immediately following said execution segment information as new programming now being transmitted on the channel of the channel mark of said meter-monitor segment segment) then meter-monitor segment information that includes the **"program unit identification code"** and subject matter information of said first command and **the channel mark of cable channel 13** … (Said message whose transmission is caused by receiving said first command enables microcomputer, 205, in a fashion described more fully below, to tune automatically to receive the program that said "program unit identification code" identifies if said program is of interest, …
			Page 267 lines 20-28	

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			from example #5.	All eight of said messages are commands. The 1st- and 3rd-new-program-message (#5) and the 1st-new-radio-program- message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
transmitter station.	Column 10 lines 24-28.	FIGS. 3A, 3B and 3C illustrates one instance of such use. FIGS. 3A, 3B, and 3C illustrate the use of Signal Processing Apparatus and Methods at a cable television system "head end" transmission facility that cablecasts several channels of television programing.	Page 324 lines 18-21.	Fig. 6 illustrates Signal Processing Apparatus and Methods at an intermediate transmission station that is a cable television system "head end" and that cablecasts several channels of television programming.

Claims 31 & 32 are cancelled.

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33. A method of outputting a multimedia presentation at	Column 20 lines 12-15.	FIG 6D illustrates one method for co-ordinating the presentation of information through the use of print with video. FIG 6D also illustrates possible uses of a decrypter and a local input.	Page 469 lines 3-6.	Fig. 7F illustrates a method for generating and communicating information to selected subscribers through the coordination of computers, television, and broadcast print. Fig. 7F also illustrates use of a local input, 225.
			Page 478 lines 1-5.	(Whichever transmission method is employed the information of said second message can be encrypted and caused to be decrypted in any of the methods described above—for example, in the method of the first message of example #4.)
a receiver station, said method comprising the steps of:	Column 17 lines 47-53.	FIG 6 illustrates one possible configuration of equipment in a home or office or other television and/or radio	Page 390 lines 30-35.	Fig. 7 exemplifies one embodiment of an ultimate receiver station; is a subscriber station in the field distribution system, 93, of

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		receiving site. Consideration of FIGS. 6F and 6G is facilitated by consideration, first, of individual examples of the types of co-ordinated presentations that the signal apparatus and methods described here can permit.	Page 396 lines 8-10.	the intermediate transmission station of Fig. 6; and may be a home, an office, a theater, a hotel, or any other station where programming such as television or radio is displayed to persons. Features, benefits, and modes of operation of the station of Fig. 7 are demonstrated in the following individual examples.
receiving a first signal from a remote transmitter station;	Column 20 lines 16-19.	Suppose a viewer watches a television program on cooking techniques that is received on TV set, 202, via box, 201. Julia Childs's "The French Chef" is one such program.	Page 470 lines 1-3 and	...transmits the programming transmission of a particular conventional television program on cooking techniques that is called "Exotic Meals of India."
			Page 470 lines 9-12.	At the station of Fig. 7 and 7F (which station is a subscriber station of the intermediate station of Fig. 6), in the fashions described above, apparatus is caused to receive the particular transmission of said program that is ...
			Page 470 lines 19-21.	... to display the television information of said transmission (that is, information of said audio and video) at monitor, 202M.
	Column 18 lines 48-51.	Several separate news services transmit news on different channels carried on the multi- channel cable transmission to converter boxes, 222 and 201, and to signal processor, 200.	Page 420 lines 21-29.	Two remote stations--remote news-service-A station and remote news-service-B station--transmit, from geographically separate locations, two different broadcast print transmissions. The intermediate transmission station of Fig. 6 receives and retransmits information the transmissions of said remote stations on digital data channels A and B, respectively, that are inputted to converter boxes, 222 and 201, and to signal processor, 200.
	For example Column 10 lines 24-28.	FIGS. 3A, 3B and 3C illustrates one instance of such use. FIGS. 3A, 3B, and 3C illustrate the use of Signal Processing	*For example* Page 324 lines 18-21.	Fig. 6 illustrates Signal Processing Apparatus and Methods at an intermediate transmission station that is a cable television

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		Apparatus and Methods at a cable television system "head end" transmission facility that cablecasts several channels of television programing.		system "head end" and that cablecasts several channels of television programming.
outputting said first signal at said receiver station;	Column 20 lines 19-23.	Halfway through the program, the host says, "If you are interested in cooking what we are preparing here and want a printed copy of the recipe for a charge of only 10 cents, press 567 on your Widget Signal Generator and Local Input."	Page 471 lines 6-13.	Halfway through the program the host says, "If you are interested in cooking what we are preparing here and want a your own printed copy of the recipe tailored to your own tastes and your own shopping list for a charge of only 10 cents, enter on your Widget Signal Generator and Local Input the information that you see on your screen." The information that appears on the screen of each subscriber is "TV567#".
receiving a user response	Column 20 lines 23-26.	The viewer then presses buttons 567 on local input, 225, which signal is conveyed to the buffer/comparator, 8 (referring to Fig. 1), of signal processor, 200, ...	Page 471 lines 14-21.	Each subscriber--in particular, the subscriber of the station of Figs. 7 and 7F, ... --enters TV567#, in a fashion well known in the art, at the keyboard of the specific local input, 225, of his own station which causes said input, 225, to transmit a particular preprogrammed process-local-input instruction and said TV567# information to the controller, 20, of the signal processor, 200, of said station.
based on said step of outputting;	Column 20 lines 19-23.	Halfway through the program, the host says, "If you are interested in cooking what we are preparing here and want a printed copy of the recipe for a charge of only 10 cents, press 567 on your Widget Signal Generator and Local Input."	Page 471 lines 6-13.	Halfway through the program the host says, "If you are interested in cooking what we are preparing here and want a your own printed copy of the recipe tailored to your own tastes and your own shopping list for a charge of only 10 cents, enter on your Widget Signal Generator and Local Input the information that you see on your screen." The information that appears on the screen of each subscriber is "TV567#".
identifying content of said first signal;	*In general* Column 17 lines 39-41.	Signal processor apparatus have the ability to identify instruction and information signals in one or more	*In general* Page 15 lines 16-23.	The frequencies may convey television, radio, or other programming transmissions....The scanners/switches, working in parallel or

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		inputted television and radio programing transmissions, …		series or combinations, transfer the transmissions to receiver/decoder/detectors that identify signals encoded in programming transmissions and convert the encoded signals to digital information; …
	Specifically Column 20 lines 27-29.	… a signal is identified in the incoming programing on TV set, 202, by decoder, 203, …	*Specifically* Page 471 line 35 to page 472 line 1.	At the station of Figs. 7 and 7F, said message is detected at TV signal decoder, 145, …
comparing,	Column 20 lines 31.	This signal instructs buffer/**comparator,** 8, …	Page 472 lines 13-15.	Receiving said message causes controller, 20, to load and execute said check-for-entered-information-and-process instructions, …
based on said user response,	Column 20 lines 23-26.	The viewer then presses buttons 567 on local input, 225, which signal is conveyed to the buffer/comparator, 8 (referring to Fig. 1), of signal processor, 200, …	Page 471 lines 14-21.	Each subscriber--in particular, the subscriber of the station of Figs. 7 and 7F, …--enters TV567#, in a fashion well known in the art, at the keyboard of the specific local input, 225, of his own station which causes said input, 225, to transmit a particular preprogrammed process-local-input instruction and said TV567# information to the controller, 20, of the signal processor, 200, of said station.
	Column 20 lines 26-27.	… to hold and process further in a predetermined fashion.	Page 471 lines 22-25.	Receiving said instruction and information causes the controller, 20, at each station where TV567# is entered, in a predetermined fashion, to retain said TV567# information at particular last-local-input-# memory.
said content to	Column 20 lines 27-32.	Five minutes later, a signal is identified in the incoming programing on TV set, 202, by decoder, 203, which is also transferred by processor, 204, to buffer/comparator, 8, of signal processor, 200. This signal instructs buffer/comparator, 8, that, if 567 has been received from signal generator, 225, …	Page 471 line 26 to page 472 line 17.	Five minutes later, said program originating studio embeds in the transmission of the "Exotic Meals of India" programing and transmits a particular first SPAM message that consists of … check-for-entered-information-and-process instructions, … At the station of Figs. 7 and 7F, said message is detected at TV signal decoder, 145, and said execution segment information

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				invokes particular controlled function instructions that cause said message to be transferred to the controller, 20, of signal processor, 200. ... Receiving said message causes controller, 20, to load and execute said check-for-entered-information-and-process instructions, and executing said instructions causes controller, 20, to determine that TV567# information exists at said last-local-input-# memory ....
data stored at said receiver station;	Column 20 lines 23-26.	The viewer then presses buttons 567 on local input, 225, which signal is conveyed to the buffer/comparator, 8 (referring to Fig. 1), of signal processor, 200, ...	Page 471 lines 14-21.	Each subscriber--in particular, the subscriber of the station of Figs. 7 and 7F, ...--enters TV567#, in a fashion well known in the art, at the keyboard of the specific local input, 225, of his own station which causes said input, 225, to transmit a particular preprogrammed process-local-input instruction and said TV567# information to the controller, 20, of the signal processor, 200, of said station.
	Column 20 lines 26-27.	... to hold and process further in a predetermined fashion.	Page 471 lines 22-25.	Receiving said instruction and information causes the controller, 20, at each station where TV567# is entered, in a predetermined fashion, to retain said TV567# information at particular last-local-input-# memory.
tuning said receiver station to receive a second signal based on said step of comparing; and	Column 20 lines 31-36.	This signal instructs buffer/comparator, 8, that, if 567 has been received from signal generator, 225, signal processor, 200, should, in a predetermined fashion, instruct tuner, 223, to tune cable converter box, 222, to the appropriate channel to receive the recipe in encoded digital form ...	Page 471 line 26 to page 472 line 17.	Five minutes later, said program originating studio embeds in the transmission of the "Exotic Meals of India" programming and transmits a particular first SPAM message that consists of ... check-for-entered-information-and-process instructions, ... At the station of Figs. 7 and 7F, said message is detected at TV signal decoder, 145, and said execution segment information invokes particular controlled function instructions that cause said message to be transferred to the controller, 20, of signal

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				processor, 200. ... Receiving said message causes controller, 20, to load and execute said check-for-entered-information-and-process instructions, and executing said instructions causes controller, 20, to determine that TV567# information exists at said last-local-input-# memory ...
			Page 476 line 34 to page 477 line 8.	(An alternate method for inputting said second message to the microcomputers, 205, at stations where TV567# is entered at a local input, 225, is to embed said message in a particular second transmission that is different from the transmission of said "Exotic Meals of India" programming and to cause a selected All signal decoder, 290, at each one of said stations to receive said second transmission, thereby causing said decoder, 290, to detect and transfer the information of said second message to the microcomputer, 205, of said station.
			Page 477 lines 8-17.	In this alternate method, ... said first SPAM message causes controller, 20, of signal processor, 200, of each one of said stations to cause the tuner, 223, of a selected converter box, 222, to tune said box, 222, to receive said second transmission; to cause the matrix switch, 258, to establish a programming communication link between said selected converter box, 222, and said decoder, 290; to cause the appropriate receiver apparatus of said decoder, 290, to receive said transmission ...
outputting said multimedia presentation at said receiver station, said multimedia presentation comprising	Column 20 lines 12-15.	FIG 6D illustrates one method for co-ordinating the presentation of information through the use of print with video. FIG 6D also illustrates possible uses of a decrypter and a local input.	Page 469 lines 3-6.	Fig. 7F illustrates a method for generating and communicating information to selected subscribers through the coordination of computers, television, and broadcast print. Fig. 7F also illustrates use of a local input,

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information included in said first signal and information included in said second signal.			Page 478 lines 1-5.	225. (Whichever transmission method is employed the information of said second message can be encrypted and caused to be decrypted in any of the methods described above—for example, in the method of the first message of example #4.)
	Column 20 lines 16-19.	Suppose a viewer watches a television program on cooking techniques that is received on TV set, 202, via box, 201. Julia Childs's "The French Chef" is one such program.	Page 470 lines 1-3 and	...transmits the programming transmission of a particular conventional television program on cooking techniques that is called "Exotic Meals of India."
			Page 470 lines 9-12.	At the station of Fig. 7 and 7F (which station is a subscriber station of the intermediate station of Fig. 6), in the fashions described above, apparatus is caused to receive the particular transmission of said program that is ...
			Page 470 lines 19-21.	... to display the television information of said transmission (that is, information of said audio and video) at monitor, 202M.
	Column 20 lines 46-49.	When the transmission of the recipe is received, box 222, transfers the transmission to decrypter, 224, for decryption and thence to printer, 221, for printing.	Page 473 lines 3-13.	One minute later, said program originating studio embeds in the transmission of said "Exotic Meals of India" programming and transmits a particular second SPAM message that consists of ... generate-recipe-... instructions ...
			Page 477 lines 12-17.	... selected converter box, 222, to tune said box, 222, to receive said second transmission; to cause the matrix switch, 258, to ... link ... said selected converter box, 222, and said decoder, 290; ... said decoder, 290, to receive said transmission....
			Page 477 lines 23-29.	... causes ... said decoder, 290, to detect and process properly the information of said

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				second message.
			Page 478 lines 1-5.	(Whichever transmission method is employed the information of said second message can be encrypted and caused to be decrypted in any of the methods described above--for example, in the method of the first message of example #4.)
			Page 475 lines 1-2.	Receiving said output information causes printer, 221, to print the information of said specific recipe and list.
34. The method of claim 33, further comprising the step of transmitting information from said receiver station	Column 20 lines 54-58.	when signal processor, 200, transfers the data in its data recorder, 16, via telephone to a remote site,	Page 28 lines 25-35.	[Signal processor in Fig.7] has capacity, at each station, for receiving monitor information that identifies what programming is available, what programming is used, and how said programming is used and capacity for assembling and retaining monitor records that document said availability and usage. It has capacity for transferring said meter records automatically to one or more remote automated billing stations that account for programming and information consumption and bill subscribers and said monitor records automatically to one or more remote so-called "ratings" stations that collect statistical data on programming availability and usage.
		that site can determine for billing purposes that the recipe was,	Page 44 lines 26-30.	... meter-monitor segments. Said segments contain meter information and/or monitor information, and the information ... causes subscriber station signal processor systems to assemble, record, and transmit meter records to remote billing stations ...
			Page 471 lines 26-31.	Five minutes later, said program originating studio embeds in the transmission of the "Exotic Meals of India" programming and

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			Page 473 lines 3-8.	transmits a particular first SPAM message that consists of … meter-monitor information.….. One minute later, said program originating studio embeds in the transmission of said "Exotic Meals of India" programming and transmits a particular second SPAM message that consists of … meter-monitor information including ….
		first, ordered	Page 472 lines 23-27 with	Executing said instructions also causes controller, 20, to initiate a particular signal record of meter information at the buffer, 14, of signal processor, 200, which record contains particular program unit information and TV567# information.
			Page 471 lines 14-16.	Each subscriber--in particular, the subscriber of the station of Figs. 7 and 7F, … --enters TV567# ….
		and, second, delivered.	Page 473 line 29 to Page 474 line 1.	Receiving said message causes the controller, 39, of decoder, 203, to load and execute said generate-recipe- … instructions at microcomputer, 205, and to transfer particular meter-monitor information to the buffer/comparator, 14, of signal processor, 200, causing said buffer/comparator, 14, to increment the information of said signal record of meter information in the fashion described above.
based on said step of receiving said user response.	Column 20 lines 19-26.	Halfway through the program, the host says, "If you are interested in cooking what we are preparing here and want a printed copy of the recipe for a charge of only 10 cents, press 567 on your Widget Signal Generator and Local Input." The viewer then presses buttons 567 on local input, 225, which signal is conveyed to the buffer/comparator, 8 (referring to Fig.	Page 471 lines 6-25.	Halfway through the program the host says, "If you are interested in cooking what we are preparing here and want a your own printed copy of the recipe tailored to your own tastes and your own shopping list for a charge of only 10 cents, enter on your Widget Signal Generator and Local Input the information that you see on your screen." The information that appears on the screen of each subscriber is

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		1), of signal processor, **200**, to hold and process further ...		"TV567#". Each subscriber--in particular, the subscriber of the station of Figs. 7 and 7F, ... --enters TV567#, in a fashion well known in the art, at the keyboard of the specific local input, 225, of his own station which causes said input, 225, to transmit a particular preprogrammed process-local-input instruction and said TV567# information to the controller, 20, of the signal processor, 200, of said station. Receiving said instruction and information causes the controller, 20, at each station where TV567# is entered, in a predetermined fashion, to retain said TV567# information at particular last-local-input-# memory.
35. The method of claim 34, wherein said information transmitted from said receiver station includes	Column 20 lines 42-45.	Then, as part of the predetermined operation, signal processor, 200, conveys to its data recorder, 16, information that the **567** order was placed by the viewer ...	Page 472 lines 23-27.	... Executing said instructions also causes controller, 20, to initiate a particular signal record of meter information at the buffer, 14, of signal processor, 200, which record contains particular program unit information and TV567# information.
	Column 20 lines 54-56.	... when signal processor, **200**, transfers the data in its data recorder, **16**, via telephone to a remote site, ...	Page 28 lines 25-35.	[Signal processor 200 in Fig.7] has capacity, at each station, for receiving monitor information that identifies what programming is available, what programming is used, and how said programming is used and capacity for assembling and retaining monitor records that document said availability and usage. It has capacity for transferring said meter records automatically to one or more remote automated billing stations that account for programming and information consumption and bill subscribers and said monitor records automatically to one or more remote so-called "ratings" stations that collect statistical data on programming availability and usage.

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at least a portion	Column 20 lines 42-45.	Then, as part of the predetermined operation, signal processor, **200**, conveys to its data recorder, **16**, information that the **567** order was placed by the viewer ...	Page 472 lines 23-27.	... Executing said instructions also causes controller, 20, to initiate a particular signal record of meter information at the buffer, 14, of signal processor, 200, which record contains particular program unit information and TV567# information.
of said user response.	Column 20 lines 19-26.	Halfway through the program, the host says, "If you are interested in cooking what we are preparing here and want a printed copy of the recipe for a charge of only 10 cents, press 567 on your Widget Signal Generator and Local Input." The viewer then presses buttons 567 on local input, **225**, which signal is conveyed to the buffer/comparator, **8** (referring to Fig. 1), of signal processor, **200**, to hold and process further ...	Page 471 lines 6-25.	Halfway through the program the host says, "If you are interested in cooking what we are preparing here and want a your own printed copy of the recipe tailored to your own tastes and your own shopping list for a charge of only 10 cents, enter on your Widget Signal Generator and Local Input the information that you see on your screen." The information that appears on the screen of each subscriber is "TV567#". Each subscriber--in particular, the subscriber of the station of Figs. 7 and 7F, ... --enters TV567#, in a fashion well known in the art, at the keyboard of the specific local input, 225, of his own station which causes said input, 225, to transmit a particular preprogrammed process-local-input instruction and said TV567# information to the controller, 20, of the signal processor, 200, of said station. Receiving said instruction and information causes the controller, 20, at each station where TV567# is entered, in a predetermined fashion, to retain said TV567# information at particular last-local-input-# memory.
36. The method of claim 34, wherein said transmitted information is transmitted by telephone.	Column 20 lines 54-56.	... when signal processor, **200**, transfers the data in its data recorder, **16**, via telephone to a remote site, ...	Page 28 lines 25-35.	[Signal processor 200 in Fig.7] has capacity, at each station, for receiving monitor information that identifies what programming is available, what programming is used, and how said programming is used and capacity for assembling and retaining monitor records that document said availability and usage. It

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				has capacity for transferring said meter records automatically to one or more remote automated billing stations that account for programming and information consumption and bill subscribers and said monitor records automatically to one or more remote so-called "ratings" stations that collect statistical data on programming availability and usage.
			Page 32 lines 16-20.	Buffer/comparator, 14, also has means for transferring received information immediately to a remote site or sites via telephone connection, 22, and for communicating a requirement for such transfer to controller, 20, which causes such transfer.
37. A multimedia presentation apparatus comprising:	Column 19 line 64 to column 20 line 2.	This signal instructs microcomputer, **205**, to transmit the first overlay to TV set, **202**, for as long as it receives the same instruction signal from processor, **204**. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 26 lines 4-11.	... "GRAPHICS ON". Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
			Page 451 line 3.	And the Fig. 1C combining is displayed.
at least one receiver for receiving a plurality of signals,	Column 19 lines 35-37.	Each weekday, microcomputer, **205**, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day.	Page 449 lines 13-26.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the

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				preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.)
	Column 19 lines 45-49.	When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, several instruction signals are identified by decoder, 203, and transferred to microcomputer, 205. These signals instruct microcomputer, 205	Page 451 lines 6-7.	When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, ...
			Page 23 line 35 to page 24 line 4.	Subsequently, a second series of instructions is embedded and transmitted at said program originating studio. Said second series is detected and converted into usable digital signals by decoder, 203, and inputted to microcomputer, 205, in the same fashion as the first series.
			Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed ... to identify ... in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus.
			Page 24 lines 5-6.	Microcomputer, 205, evaluates the initial signal word or words which instruct it to ...
			Page 451 lines 7-9.	... the program instruction set in the first message of the "Wall Street Week" example instructs microcomputer, 205, to ...
wherein at least a portion of said plurality	Column 19 lines 45-49.	When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening,	Page 451 lines 6-7.	When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, ...

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of signals is received from a source		several instruction signals are identified by decoder, **203**, and transferred to microcomputer, **205**. These signals instruct microcomputer, **205** …	Page 23 line 35 to page 24 line 4.	Subsequently, a second series of instructions is embedded and transmitted at said program originating studio. Said second series is detected and converted into usable digital signals by decoder, 203, and inputed to microcomputer, 205, in the same fashion as the first series.
			Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed … to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus.
			Page 24 lines 5-6.	Microcomputer, 205, evaluates the initial signal word or words which instruct it to …
			Page 451 lines 7-9.	… the program instruction set in the first message of the "Wall Street Week" example instructs microcomputer, 205, to ….
	Column 19 lines 35-37.	Each weekday, microcomputer, **205**, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day.	Page 449 lines 13-26.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which

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				remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.)
external to said multimedia presentation apparatus,	Column 19 lines 60-63.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission.	Page 59 lines 29-33.	A SPAM message is the modality whereby the original transmission station that originates said message controls specific addressed apparatus at subscriber stations. The information of any given SPAM transmission consists of a series or stream of sequentially transmitted SPAM messages.
			Page 25 line 34 to page 26 line 1.	At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted.
			Page 90 lines 4-7. Applicants teach this as the composition of the instruction signal of page 25 line 34. See page 26 lines 1-4 and 20-28, page 89 lines 3-6, and page 90 lines 4-11.	The second message is of the information associated with the second combining synch command. Said second command has a "00" header, an execution segment, and a meter-monitor …
said plurality of signals including at least two	Column 19 lines 27-29.	…and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."	Page 445 line 24 to page 446 line 1.	… instructions causes controller, 20, to switch power on to monitor, 202M, and commence transferring the television output transmission of microcomputer, 205, to said monitor, 202M; … Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, and to tune monitor, 202M, in a predetermined fashion.
			Page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and

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				audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio …
	Column 19 lines 35-37.	Each weekday, microcomputer, **205**, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day.	Page 449 lines 13-26.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.)
media;	Column 1 lines 6-8.	At the present time, vast amounts of programing are transmitted through various media throughout the United States.…	Page 1 lines 27-28.	But television, radio, and broadcast print are only mass media.
a storage device to for storing a first	Column 19 lines 35-41.	Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It **records** those prices that relate to the stocks in its stored portfolio.	Page 449 lines 13-35.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber

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				stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.) Alternatively, microcomputer, 205, is caused in a predetermined fashion (for example, by a SPAM message a given transmission monitored by signal processor, 200, in any of the above described fashions) automatically to telephone a remote data service computer, by means of network, 262, in a fashion well known in the art, and to cause said remote computer to select and transmit the particular closing price datum or data of the stock or stocks of the portfolio of said microcomputer, 205, thereby causing said microcomputer, 205, to record said datum or data in a predetermined fashion.
medium included in said at least a portion of said plurality of signals to	In general, Column 3 lines 48-56. For example, see "One Digital Data Ch."	Another method has application at receiver sites such as private homes or public places like theaters, hotels, brokerage offices, etc., whether commercial establishments or not. This method provides techniques whereby, automatically, single channel, single medium presentations, be they television, radio, or other electronic transmissions, may be recorded, co-ordinated in time with other programing previously transmitted and recorded, or processed in other fashions. [See Fig. 6C.]	In general, Page 86 lines 12-14. For example, see "One Digital Data Channel," or, Page 85 lines 33-35.	(Hereinafter, the preferred normal location for transmitting signals in any given communication medium is called, the "normal transmission location".) [See Fig. 7C] In broadcast print or data communications, the preferred normal transmission location for SPAM signals is in the same location as the conventional information.
provide a first portion of a multimedia presentation;	Column 19 line 64 to column 20 line 1.	This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204.	Page 26 lines 4-10.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and

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		The viewer then sees a microcomputer generated graphic of his own stocks' performance ...		transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the ...
at least one processor operatively connected to said at least one receiver and said storage device for providing said first portion of	Column 19 line 64 to column 20 line 1.	This signal instructs microcomputer, **205**, to transmit the first overlay to TV set, **202**, for as long as it receives the same instruction signal from processor, **204**. The viewer then sees a microcomputer generated graphic of his own stocks' performance ...	Page 26 lines 4-10.	Said signal instructs microcomputer, **205**, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the ...
said multimedia presentation,	Column 19 lines 67 to column 20 line 2.	The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 451 line 3. Page 26 lines 8-11.	And the Fig. 1C combining is displayed. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
wherein said at least one processor coordinates	Column 19 lines 31-34.	FIG **6C** can also illustrate how programing delivered at different times to one place can be co-ordinated to give a multimedia presentation at one time in one place.	Page 18 lines 24-27. page 450 line 27 to page 451 line 11.	Fig. 7C is a block diagram of signal processing apparatus and methods selecting receivable information and programming and controlling combined medium, multi-channel presentations. (To accomplish all this has required only that the subscriber of microcomputer, 205, [and other subscribers at other stations] cause the installation and connection of the apparatus shown in the figures of this submission, especially Fig. 7 (and 7C); caused his microcomputer, 205, to be preprogrammed as described above; and preinformed microcomputer, 205, of his wish to view said

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				"Wall Street Week" program by causing the aforementioned select-WSW information to be recorded at said microcomputer, 205.) Then the combined medium combining process described above in "One Combined Medium" and in examples #1, #2, #3, #4, etc. commences. And the Fig. 1C combining is displayed. But the combining of Fig. 1C is just part of a larger process. When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, the program instruction set in the first message of the "Wall Street Week" example instructs microcomputer, 205, to generate not one but a plurality overlays. The combining of Fig. 1C is merely the first.
			In general, Page 40 line 31 to page 41 line 3.	(Hereinafter, stations that originate broadcast transmissions are called "original transmission stations," stations that receive and retransmit broadcast transmissions are called "intermediate transmission stations", and stations where subscribers view programming are called "ultimate receiver stations.") At said stations, SPAM signals address, control, and coordinate diverse apparatus.....
			For example, see page 469 lines 1-2.	AUTOMATING U. R. STATIONS ... EXAMPLES #9 AND #10 CONTINUED COORDINATING COMPUTERS, TELEVISION, AND PRINT
a presentation of said first portion of said multimedia presentation	Column 19 line 64 to column 20 line 1.	This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer generated graphic of his own stocks' performance ...	Page 26 lines 4-10.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the

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				subscriber's own portfolio performance overlaid on the …
with a presentation of a received second medium	Column 19 line 53-56.	Subsequently in the program, the host says, "Here is what the Dow Jones Industrials did is the past week," and a studio generated graphic is pictured.	Page 25 lines 26-33.	During this time the program may show the so-called "talking head" of the host as he describes the behavior of the stock market over the course of the week. Then the host says, "Now as we turn to the graphs, here is what the Dow Jones Industrials did in the week just past," and a studio generated graphic is transmitted. Fig. 1B shows the image of said graphic as it appears on the video screen of TV monitor, 202M.
based on	Column 19 lines 60-66.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, **203**, and transferred via processor, **204**, to microcomputer, **205**. This signal instructs microcomputer, **205**, to transmit the first overlay to TV set, **202**, …	Page 25 line 33 to page 26 line 2..	Then the host says, "And here is what your portfolio did." At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205; and executed …
			Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed to process said information automatically. Controller, 39, is preprogrammed to … correct errors in retained received information by means of forward error correction techniques well known in the art; to convert, as may be required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; … to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus.

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			Page 26 lines 4-8.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M.
determining content of said second medium; and	Column 19 lines 17-23.	... processor or monitor, **12**, which reacts, in a predetermined fashion by passing also externally to microcomputer, **205**, all signals that it passes to buffer/ comparator, **14**. Analyzing these identifier signals in a predetermined fashion, microcomputer, **205**, determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, ...
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new- program-program-message (#5) and the 1st-new-radio-program-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, ... to input .... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on-CC13.... Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week"*

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				program when said program is transmitted. Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	… to receive the transmission of cable channel 13; …
	Column 19 lines 27-29.	…and also microcomputer, **205**, may instruct switch, **216**, to turn TV set, **202**, on and tuner, **215**, to tune appropriately to "Wall Street Week."	Page 445 line 24 to page 446 line 1.	… instructions causes controller, 20, to switch power on to monitor, 202M, and commence transferring the television output transmission of microcomputer, 205, to said monitor, 202M; … Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, and to tune monitor, 202M, in a predetermined fashion.
			Page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said program, and to emit sound in accordance with said audio ….
	Column 19 lines 42-44.	Microcomputer, **205**, is preprogramed to respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programing transmission.	Page 21 lines 20-24.	Microcomputer, 205, is preprogrammed to … respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programming transmission.
at least one output device operatively connected to said at	Column 19 line 64 to column 20 line 2.	This signal instructs microcomputer, **205**, to transmit the first overlay to TV set, **202**, for as long as it receives the same	Page 26 lines 4-11.	… "GRAPHICS ON". Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its

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least one receiver and at least one of said at least one processor and said storage device for		instruction signal from processor, **204**. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.		graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic. And the Fig. 1C combining is displayed.
outputting said multimedia presentation to a viewer or listener at said multimedia presentation apparatus	Column 19 lines 67 to column 20 line 2.	The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 451 line 3. Page 26 lines 8-11.	And the Fig. 1C combining is displayed. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
based on said coordinating such that	Column 19 lines 60-66.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, **203**, and transferred via processor, **204**, to microcomputer, **205**. This signal instructs microcomputer, **205**, to transmit the first overlay to TV set, **202**, …	Page 25 line 33 to page 26 line 2. Page 37 line 26 to page 38 line 8.	Then the host says, "And here is what your portfolio did." At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205; and executed … In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed to process said information automatically. Controller, 39, is preprogrammed to … correct errors in retained received information by means of forward error correction techniques well known in the art; to convert, as may be required, the corrected information, by means of input protocol techniques well known in the

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		art, into digital information that subscriber station apparatus can receive and process; … to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus.		
			Page 26 lines 4-8.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M.
content of said first portion has a	Column 19 line 67 to column 20 line 1.	The viewer then sees a microcomputer generated graphic of his own stocks' performance …	Page 26 lines 8-11.	TV monitor, 202M, then displays … the microcomputer generated graphic of the subscriber's own portfolio performance …
predetermined	Column 20 lines 8-10.	This is only one of many examples of the co-ordination at one time and in one place of programing and information material delivered at different times.	Page 27 line 34 to Page 28 line 3.	This "Wall Street Week" portfolio performance example provides but one of many examples of television based combined medium programming. This television based combined medium is but one example of many combined media
	Column 19 lines 45-53.	When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening,	Page 451 lines 6-7.	When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, …
		several instruction signals are identified by decoder, 203, and transferred to microcomputer, 205.	Page 23 line 35 to page 24 line 4.	Subsequently, a second series of instructions is embedded and transmitted at said program originating studio. Said second series is detected and converted into usable digital signals by decoder, 203, and inputted to microcomputer, 205, in the same fashion as the first series.
			Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is

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				preprogrammed ... to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus.
		These signals instruct microcomputer, 205,	Page 24 lines 5-16.	Microcomputer, 205, evaluates the initial signal word or words which instruct it to load at RAM (from the input buffer to which decoder, 203, inputs) and run the information of a particular set of instructions that follows said word or words just as the information of a file named FILE.EXE, recorded on the contained floppy disk, would be loaded at RAM (from the input buffer to which the disk drive of said disk inputs) and run were the command "FILE" entered from the console keyboard to the system level of the installed disk operating system. (Hereinafter, such a set of instructions that is loaded and run is called a "program instruction set."
		to generate several graphic video overlays,	Page 451 lines 7-11.	...the program instruction set in the first message of the "Wall Street Week" example instructs microcomputer, 205, to generate not one but a plurality overlays. The combining of Fig. 1C is merely the first.
		which microcomputer, 205, has the means to generate and transmit and TV set, 202, has the means to receive and display, and to	Page 19 line 29 to page 20 line 20.	Microcomputer, 205, is a conventional microcomputer system ... for generating computer graphic information; for receiving a composite video transmission; for combining said graphic information onto the video information of said transmission by graphic overlay techniques, well known in the art; and for outputting the resulting combined information to a TV monitor, 202M, in a composite video transmission. ... TV monitor, 202M, has capacity for receiving composite video and audio transmissions and for presenting a conventional television video

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		transmit these overlays to TV set, **202**,		image and audio sound.
			Page 26 lines 4-8.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M.
		upon command.	Page 44 lines 14-17.	A command is an instance of signal information that is addressed to particular subscriber station apparatus and that causes said apparatus to perform a particular function or functions.
			Page 26 lines 20-28.	(Hereinafter, an instruction such as the above signal of "GRAPHICS ON" that causes subscriber station apparatus to execute a combining operation in synchronization is called a "combining synch command." Said initial signal word or words that preceded the above program instruction set provide another example of a combining synch command in that said word or words synchronized all subscriber station computers in commencing loading and running information for a particular combining.)
relationship to content of said second medium.	Column 19 lines 67 to column 20 line 2.	The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 451 line 3.	And the Fig. 1C combining is displayed.
			Page 26 lines 8-11.	TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
	Column 19 line 53-56.	Subsequently in the program, the host says, "Here is what the Dow Jones Industrials did is the past week," and a studio generated graphic is pictured.	Page 25 lines 26-33.	During this time the program may show the so-called "talking head" of the host as he describes the behavior of the stock market over the course of the week. Then the host says, "Now as we turn to the graphs, here is

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				what the Dow Jones Industrials did in the week just past," and a studio generated graphic is transmitted. Fig. 1B shows the image of said graphic as it appears on the video screen of TV monitor, 202M.
38. The apparatus of claim 37, wherein said at least one processor determines said content of said second medium by a processing an identifier transmitted from said source external to said multimedia presentation apparatus, said multimedia presentation apparatus further comprising	Column 19 lines 17-23.	... processor or monitor, **12**, which reacts, in a predetermined fashion by passing also externally to microcomputer, **205**, all signals that it passes to buffer/ comparator, **14**. Analyzing these identifier signals in a predetermined fashion, microcomputer, **205**, determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, ...
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, ... to input ... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputed is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on-CC13... Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week"*

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				program when said program is transmitted. Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	... to receive the transmission of cable channel 13; ...
a detector operatively connected to said at least one processor for detecting said identifier.	Column 6 lines 61-64 *See Fig. 1.*	The base band signal is also inputted through path B to an audio demodulator, 35, which further inputs a high pass filter, 36, and a digital detector, **37**.	Page 35 lines 19-24. *See Fig. 2.*	Path B inputs to a standard audio demodulator, 35, which uses demodulator techniques, well known in the art, to define the television audio transmission and transfers said audio information to high pass filter, 36. Said filter, 36, defines and transfers to digital detector, 37, the portion of said audio information that is of interest.
39. The apparatus of claim 38, wherein said multimedia presentation apparatus receiving a multichannel signal, said multimedia presentation apparatus further comprising	Column 19 lines 14-15.	... pass all program and channel identifiers on all programing being cablecast on the multi-channel system.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, of the station of Fig. 7 and 7C ...
			Page 248 lines 22-26 from example #5.	Via a conventional multi- channel cable transmission, in a fashion well known in the art, four channels of conventional television programming and two conventional FM radio signals are inputted to a first alternate contact of switch, 1, and to mixer, 2.
			Page 250 lines 13-16 from example #5.	Example #5 begins with the embedding and transmitting, at the remote station that originates the "Wall Street Week" broadcast,

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			Page 252 lines 15-35 from example #5.	of the first message of the "Wall Street Week" program …
				Then, in a predetermined fashion, control processor, 39J, determines that said first command contains subject matter meter-monitor information causing said control processor, 39J, to transmit a message that consists of … execution segment information that is addressed to microcomputer, 205, (and that causes microcomputer, 205, to process the information of the meter- monitor segment immediately following said execution segment information as new programming now being transmitted on the channel of the channel mark of said meter-monitor segment segment) then meter-monitor segment information that includes the **"program unit identification code"** and subject matter information of said first command and **the channel mark of cable channel 13** … (Said message whose transmission is caused by receiving said first command enables microcomputer, 205, in a fashion described more fully below, to tune automatically to receive the program that said "program unit identification code" identifies if said program is of interest, …
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new-program-message (#5) and the 1st-new-radio-program- message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)

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a converter operatively connected to said at least one receiver for communicating a portion of said multichannel signal.	Column 19 lines 24-25. *See Fig. 6C.*	... microcomputer, **205**, may instruct tuner, **214**, to switch box, **201**, to channel X...	Page 295 lines 6-8. Page 439 lines 9-15. *See Fig. 7C.*	Then, automatically, controller, 20, causes a selected tuner, 214, to tune to the frequency of cable channel 13, thereby causing its associated converter box, 201, to convert its... ... to cause selected apparatus of said station--cable converter box, 201, ... to receive the transmission of cable channel 13;...
40. The apparatus of claim 39, further comprising a first controlled device operatively connected to said at least one processor for causing said converter to select said second medium.	Column 19 lines 24-25.	... microcomputer, **205**, may instruct tuner, **214**, to switch box, **201**, to channel X...	Page 295 lines 6-8. Page 439 lines 9-15.	Then, automatically, controller, 20, causes a selected tuner, 214, to tune to the frequency of cable channel 13, thereby causing its associated converter box, 201, to convert its... ... to cause selected apparatus of said station--cable converter box, 201, ... to receive the transmission of cable channel 13;...

41. The apparatus of claim 40, further comprising a second storage device operatively connected to said converter for storing said second medium.	Column 19 lines 23-27.	... microcomputer, **205**, may instruct tuner, **214**, to switch box, **201**, to channel X and may instruct control system, **220**, to turn video recorder, **217**, on and record "Wall Street Week,"...	Page 437 lines 1-6.
			
			Page 439 lines 9-15.
			
			Page 295 lines 6-8.
				Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW-on-CC13-at-particular- 8:30 information to the controller, 20.
				    Receiving said please-fully-enable-WSW-on-CC13-at- particular-8:30 information causes controller, 20, in a predetermined fashion, to prepare particular apparatus ...
				
				    ... to cause selected apparatus of said station--cable converter box, 201, ... to receive the transmission of cable channel 13; ...

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			Page 439 lines 9-15.	Then, automatically, controller, 20, causes a selected tuner, 214, to tune to the frequency of cable channel 13, thereby causing its associated converter box, 201, to convert its...
			Page 445 lines 24-27.	... to cause selected apparatus of said station–cable converter box, 201, ... to receive the transmission of cable channel 13;
				...
			Page 446 lines 18-23.	... instructions causes controller, 20, ...; to switch power on to video recorder/player, 217,....
				... controller, 20, ... causes recorder/player, 217, to record said information of the "Wall Street Week" program.
42. The apparatus of claim 41, further comprising a second controlled device operatively connected to said at least one processor for causing said second storage device to store said second medium.	Column 19 lines 23-27.	... microcomputer, 205, may instruct tuner, 214, to switch box, 201, to channel X and may instruct control system, 220, to turn video recorder, 217, on and record "Wall Street Week," ...	Page 437 lines 1-6.	Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW-on-CC13-at-particular- 8:30 information to the controller, 20.
				Receiving said please-fully-enable-WSW-on-CC13-at- particular-8:30 information causes controller, 20, in a predetermined fashion, to prepare particular apparatus ...
			Page 439 lines 9-15.	... to cause selected apparatus of said station–cable converter box, 201, ... to receive the transmission of cable channel 13;
			Page 295 lines 6-8.	...
				Then, automatically, controller, 20, causes a selected tuner, 214, to tune to the frequency of cable channel 13, thereby causing its

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			Page 439 lines 9-15.	associated converter box, 201, to convert its…
			Page 445 lines 24-27.	… to cause selected apparatus of said station–cable converter box, 201, … to receive the transmission of cable channel 13;

… |
| | | | Page 446 lines 18-23. | … instructions causes controller, 20, …; to switch power on to video recorder/player, 217,…

… controller, 20, … causes recorder/player, 217, to record said information of the "Wall Street Week" program. |
| 43. A method of enabling | Column 19 lines 60-66. | At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205. This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, … | Page 25 line 33 to page 26 line 2..

Page 37 line 26 to page 38 line 8. | Then the host says, "And here is what your portfolio did." At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205; and executed …

In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed to process said information automatically. Controller, 39, is preprogrammed to … correct errors in retained received information by means of forward error correction techniques well known in the art; to convert, as may be required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; … |

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			Page 26 lines 4-8.	to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus. Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M.
a receiver station in	Column 17 lines 47-53.	FIG 6 illustrates one possible configuration of equipment in a home or office or other television and/or radio receiving site. Consideration of FIGS. 6F and 6G is facilitated by consideration, first, of individual examples of the types of co-ordinated presentations that the signal apparatus and methods described here can permit.	Page 390 lines 30-35. Page 396 lines 8-10.	Fig. 7 exemplifies one embodiment of an ultimate receiver station; is a subscriber station in the field distribution system, 93, of the intermediate transmission station of Fig. 6; and may be a home, an office, a theater, a hotel, or any other station where programming such as television or radio is displayed to persons. Features, benefits, and modes of operation of the station of Fig. 7 are demonstrated in the following individual examples.
a network	Column 15 lines 57-62.	The signals for which the decoders are monitoring are likely to be unique digital codes that may identify each programing or data unit received and the source of each. They may identify networks, broadcast stations, channels on cable systems, and possibly times of transmission.	Page 315 lines 20-24. Page 44 lines 26-32.	Each one of said decoders is preprogrammed to detect and transfer to said onboard controller, 14, via said bus means, the meter-monitor information of every unencrypted SPAM message in the transmission to which its associated apparatus is tuned. Commands often contain meter-monitor segments. Said segments contain meter information and/or monitor information, and the information of said segments causes subscriber station signal processor systems to assemble, record, and transmit meter records to remote billing stations and monitor records to remote ratings stations in fashions that are

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				described more fully below.
			Page 49 line 26 to Page 50 line 4.	Meter-monitor segments contain meter information and/or monitor information. Examples of categories of such information include: ... unique codes for programming; ... and unique codes that identify the sources and suppliers of computer data. ... origins of transmissions (eg., network source stations, broadcast stations, cable head end stations); dates and times ...
			Page 28 lines 26-27.	... **monitor information that identifies** what **programming** is available, ...
to output a multimedia presentation, said receiver station	Column 19 line 64 to column 20 line 2.	This signal instructs microcomputer, **205**, to transmit the first overlay to TV set, **202**, for as long as it receives the same instruction signal from processor, **204**. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 26 lines 4-11.	... "GRAPHICS ON". Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
			Page 451 line 3.	And the Fig. 1C combining is displayed.
	Column 19 lines 31-34.	FIG **6C** can also illustrate how programing delivered at different times to one place can be co-ordinated to give a multimedia presentation at one time in one place.	Page 18 lines 24-27.	Fig. 7C is a block diagram of signal processing apparatus and methods selecting receivable information and programming and controlling combined medium, multi-channel presentations.
			page 450 line 27 to page 451 line 11.	(To accomplish all this has required only that the subscriber of microcomputer, 205, [and other subscribers at other stations] cause the installation and connection of the

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				apparatus shown in the figures of this submission, especially Fig. 7 (and 7C); caused his microcomputer, 205, to be preprogrammed as described above; and preinformed microcomputer, 205, of his wish to view said "Wall Street Week" program by causing the aforementioned select-WSW information to be recorded at said microcomputer, 205.) Then the combined medium combining process described above in "One Combined Medium" and in examples #1, #2, #3, #4, etc. commences. And the Fig. 1C combining is displayed. But the combining of Fig. 1C is just part of a larger process. When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, the program instruction set in the first message of the "Wall Street Week" example instructs microcomputer, 205, to generate not one but a plurality overlays. The combining of Fig. 1C is merely the first.
adapted to store a first	Column 19 lines 35-41.	Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.	Page 449 lines 13-35.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.)

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				Alternatively, microcomputer, 205, is caused in a predetermined fashion (for example, by a SPAM message a given transmission monitored by signal processor, 200, in any of the above described fashions) automatically to telephone a remote data service computer, by means of network, 262, in a fashion well known in the art, and to cause said remote computer to select and transmit the particular closing price datum or data of the stock or stocks of the portfolio of said microcomputer, 205, thereby causing said microcomputer, 205, to record said datum or data in a predetermined fashion.
medium to	In general, Column 3 lines 48-56. For example, see "One Digital Data Ch."	Another method has application at receiver sites such as private homes or public places like theaters, hotels, brokerage offices, etc., whether commercial establishments or not. This method provides techniques whereby, automatically, single channel, single medium presentations, be they television, radio, or other electronic transmissions, may be recorded, co-ordinated in time with other programing previously transmitted and recorded, or processed in other fashions. [See Fig. 6C.]	In general, Page 86 lines 12-14. For example, see "One Digital Data Channel," or, Page 85 lines 33-35.	(Hereinafter, the preferred normal location for transmitting signals in any given communication medium is called, the "normal transmission location".) [See Fig. 7C] In broadcast print or data communications, the preferred normal transmission location for SPAM signals is in the same location as the conventional information.
provide a first portion of said multimedia presentation and	Column 19 line 64 to column 20 line 1.	This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer generated graphic of his own stocks' performance ...	Page 26 lines 4-10.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the ...

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to output said multimedia presentation by	Column 19 line 64 to column 20 line 2.	This signal instructs microcomputer, **205**, to transmit the first overlay to TV set, **202**, for as long as it receives the same instruction signal from processor, **204**. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 26 lines 4-11.	... "GRAPHICS ON". Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
			Page 451 line 3.	And the Fig. 1C combining is displayed.
receiving an information transmission,	Column 9 lines 53-55.	The local oscillator, being thus sequenced, will allow each signal decoder, **30** and **40**, to receive a particular frequency at a particular time interval.	Page 257 line 24 to page 258 line 19.	Said detection-complete information causes controller, 20, to cause oscillator, 6, to cause the selection of the next channel in the predetermined television channel selection pattern: wireless channel 9. Automatically oscillator, 6, causes mixer, 3, to select the frequency of channel 9 and input said frequency of interest, at a fixed frequency, to decoder, 30 .... Controller, 20, has capacity for keeping track of elapsed time, and after determining in a predetermined fashion that a particular predetermined period of time has elapsed from the input of wireless channel 9 to decoder, 30, controller, 20, ... causes oscillator, 6, to cause the selection of the next channel in the predetermined television channel selection pattern: wireless channel 13.
			Page 265 line 27 to Page 266 line 21.	Said radio-detection-complete information causes ... controller, 20, to cause oscillator, 6, to cause the selection of the next frequency in the predetermined radio frequency selection pattern: 99.0 MHz. Automatically oscillator, 6, causes mixer, 2, to select said frequency and input it, at a fixed frequency, to decoder,

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				40 ... After determining, in a predetermined fashion, that a particular predetermined period of time has elapsed from the input of said 99.0 MHz frequency to decoder, 40, controller, 20, ... causes oscillator, 6, to cause the selection of the next frequency in the predetermined radio frequency selection pattern: 100.0 MHz.
determining content of a second medium received in said information transmission,	Column 19 lines 17-23.	... processor or monitor, **12**, which reacts, in a predetermined fashion by passing also externally to microcomputer, **205**, all signals that it passes to buffer/ comparator, **14**. Analyzing these identifier signals in a predetermined fashion, microcomputer, **205**, determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18. Page 267 lines 20-28 from example #5.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, ... All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, ... to input ... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on-CC13.... Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to*

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				view (or record) said "Wall Street Week" program when said program is transmitted. Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance.
				Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	... to receive the transmission of cable channel 13; ...
coordinating presentation of	Column 19 lines 31-34.	FIG **6C** can also illustrate how programing delivered at different times to one place can be co-ordinated to give a multimedia presentation at one time in one place.	Page 18 lines 24-27.	Fig. 7C is a block diagram of signal processing apparatus and methods selecting receivable information and programming and controlling combined medium, multi-channel presentations.
			page 450 line 27 to page 451 line 11.	(To accomplish all this has required only that the subscriber of microcomputer, 205, [and other subscribers at other stations] cause the installation and connection of the apparatus shown in the figures of this submission, especially Fig. 7 (and 7C); caused his microcomputer, 205, to be preprogrammed as described above; and preinformed microcomputer, 205, of his wish to view said "Wall Street Week" program by causing the aforementioned select-WSW information to be recorded at said microcomputer, 205.)
				Then the combined medium combining process described above in "One Combined Medium" and in examples #1, #2, #3, #4, etc. commences. And the Fig. 1C combining is displayed.
				But the combining of Fig. 1C is just part of a larger process.

Claim Language of Instant Application	Reference	Applicants' Priority U.S. Pat. No. '490 Language	Reference	Instant Specification Reference	Language
					When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, the program instruction set in the first message of the "Wall Street Week" example instructs microcomputer, 205, to generate not one but a plurality overlays. The combining of Fig. 1C is merely the first.
				In general, Page 40 line 31 to page 41 line 3.	(Hereinafter, stations that originate broadcast transmissions are called "original transmission stations," stations that receive and retransmit broadcast transmissions are called "intermediate transmission stations", and stations where subscribers view programming are called "ultimate receiver stations.") At said stations, SPAM signals address, control, and coordinate diverse apparatus,.....
				For example, see page 469 lines 1-2.	AUTOMATING U. R. STATIONS ... EXAMPLES #9 AND #10 CONTINUED COORDINATING COMPUTERS, TELEVISION, AND PRINT
	Column 19 lines 60-66.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205. This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, ...		Page 25 line 33 to page 26 line 2..	Then the host says, "And here is what your portfolio did." At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205; and executed ...
				Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed to process said information automatically. Controller, 39, is preprogrammed to ... correct errors in retained received information by means of forward error correction techniques well

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				known in the art; to convert, as may be required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; ... to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus.
			Page 26 lines 4-8.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M.
said first portion of said multimedia presentation	Column 19 line 67 to column 20 line 1.	The viewer then sees a microcomputer generated graphic of his own stocks' performance ...	Page 26 lines 8-11.	TV monitor, 202M, then displays ... the microcomputer generated graphic of the subscriber's own portfolio performance ...
with a presentation of said second medium	Column 19 lines 67 to column 20 line 2.	The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 451 line 3.	And the Fig. 1C combining is displayed.
			Page 26 lines 8-11.	TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
based on determining said content, and	Column 19 lines 17-23.	... processor or monitor, 12, which reacts, in a predetermined fashion by passing also externally to microcomputer, 205, all signals that it passes to buffer/ comparator, 14. Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, ...
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions

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				described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
	Page 436 line 9 to page 437 line 3.			Receiving said Select-WSW-Program- Unit message causes decoder, 203, ... to input ... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on-CC13...

Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance.

Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20. |
| | Column 19 lines 27-29. | ...and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week." | Page 439 lines 14-15. | ... to receive the transmission of cable channel 13; ... |
| | | | Page 443 lines 19-24, and | Executing said additional 2nd-stage-enable-WSW-program instructions at the station of Fig. 7 causes controller, 20, first to cause the apparatus of said station to commence transferring the decrypted |

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			page 446 lines 17-21.	television information of the "Wall Street Week" program transmission to decoder, 203, and microcomputer, 205. In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio ....
	Column 19 lines 42-44.	Microcomputer, 205, is preprogramed to respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programing transmission.	Page 21 lines 20-24.	Microcomputer, 205, is preprogrammed to ... respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programming transmission.
outputting said multimedia presentation	Column 19 line 64 to column 20 line 2.	This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 26 lines 4-11.	... "GRAPHICS ON". Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
			Page 451 line 3.	And the Fig. 1C combining is displayed.
based on coordinating said presentation of said first portion of said multimedia presentation with said presentation of said second medium, said method comprising the steps of:	Column 19 lines 60-66.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205. This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, ...	Page 25 line 33 to page 26 line 2.. Page 37 line 26 to page 38 line 8.	Then the host says, "And here is what your portfolio did." At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205; and executed .... In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38,

Claim Language of Instant Application	Applicants' Priority U.S. Pat. No. '490		Instant Specification	
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				43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed to process said information automatically. Controller, 39, is preprogrammed to … correct errors in retained received information by means of forward error correction techniques well known in the art; to convert, as may be required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; … to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus.
			Page 26 lines 4-8.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M.
receiving said information transmission	Column 10 lines 30-39.	The facility receives programing from many sources. Transmissions may be received from satellites by satellite antenna, 50, low noise amplifiers, 51 and 52, and TV receivers, 53, 54, 55, and 56. Microwave transmissions can be received by microwave antenna, 57, and television video and audio receivers, 58 and 59. Conventional TV broadcast transmissions can be received by antenna, 60, and TV demodulator, 61. Other electronic programing input means, 62, can receive programing transmissions.	Page 324 lines 23-31.	The station receives programming from many sources. Transmissions are received from a satellite by satellite antenna, 50, low noise amplifiers, 51 and 52, and TV receivers, 53, 54, 55, and 56. Microwave transmissions are received by microwave antenna, 57, and television video and audio receivers, 58 and 59. Conventional TV broadcast transmissions are received by antenna, 60, and TV demodulator, 61. Other electronic programming transmissions are received by other programming input means, 62.
			Page 429, lines 26-32.	The program originating studio that originates the "Wall Street Week" program originates, embeds, and transmits the programming in the

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				encrypted fashion of example #7 above, and the intermediate transmission station of Fig. 6 receives and retransmits said programming, in the fashion of example #7, on cable channel 13 which is inputted, at the station of Figs. 7 and 7C, to converter boxes, 222 and 201, and to signal processor, 200.
at a transmitter station in said network,	Column 10 lines 15-20.	The signal processing apparatus outlined in FIGS. 1, A, 2B, and 2C, and their variants as appropriate, can be used to automate the operations of an **intermediate** transmission point whether it be a broadcast station transmitting only a single channel of programing or a cable system cablecasting many channels.	Page 324 lines 8-17.	The signal processing apparatus outlined in Figs. 2, 2A, 2B, 2C, and 2D, and their variants as appropriate, can be used to automate the operations of **intermediate** transmission stations that receive and retransmit programming. The stations so automated may transmit any form of electronically transmitted programming, including television, radio, print, data, and combined medium programming and may range in scale of operation from wireless broadcast stations that transmit a single programming transmission to cable systems that cablecast many channels simultaneously.
wherein said information transmission is adapted to	Column 19 lines 14-15.	… pass all program and channel identifiers on all programing being cablecast on the multi-channel system.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, of the station of Fig. 7 and 7C.…
			Page 248 lines 22-26 from example #5.	Via a conventional multi- channel cable transmission, in a fashion well known in the art, four channels of conventional television programming and two conventional FM radio signals are inputted to a first alternate contact of switch, 1, and to mixer, 2.
			Page 250 lines 13-16 from example #5.	Example #5 begins with the embedding and transmitting, at the remote station that originates the "Wall Street Week" broadcast, of the first message of the "Wall Street Week" program.…

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			Page 252 lines 15-35 from example #5.	Then, in a predetermined fashion, control processor, 39J, determines that said first command contains subject matter meter-monitor information causing said control processor, 39J, to transmit a message that consists of ... execution segment information that is addressed to microcomputer, 205, (and that causes microcomputer, 205, to process the information of the meter- monitor segment immediately following said execution segment information as new programming now being transmitted on the channel of the channel mark of said meter-monitor segment segment) then meter-monitor segment information that includes the **"program unit identification code"** and subject matter information of said first command and **the channel mark of cable channel 13** ... (Said message whose transmission is caused by receiving said first command enables microcomputer, 205, in a fashion described more fully below, to tune automatically to receive the program that said "program unit identification code" identifies if said program is of interest, ...
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new-program-message (#5) and the 1st-new-radio-program- message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
	Column 19 lines 43-44.	... instruction signals embedded in the "Wall Street Week" programing	Page 21 lines 23-24.	... instruction signals embedded in the "Wall Street Week" programming transmission.

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cause said receiver station to determine said content of said second medium, to	Column 19 lines 17-23.	transmission. ... processor or monitor, **12**, which reacts, in a predetermined fashion by passing also externally to microcomputer, **205**, all signals that it passes to buffer/ comparator, **14**. Analyzing these identifier signals in a predetermined fashion, microcomputer, **205**, determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18. Page 267 lines 20-28 from example #5. Page 436 line 9 to page 437 line 3.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, ... All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.) Receiving said Select-WSW-Program- Unit message causes decoder, 203, ... to input ... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on-CC13... Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance.

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				Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	… to receive the transmission of cable channel 13; …
coordinate presentation of	Column 19 lines 31-34.	FIG 6C can also illustrate how programing delivered at different times to one place can be co-ordinated to give a multimedia presentation at one time in one place.	Page 18 lines 24-27.	Fig. 7C is a block diagram of signal processing apparatus and methods selecting receivable information and programming and controlling combined medium, multi-channel presentations.
			page 450 line 27 to page 451 line 11.	(To accomplish all this has required only that the subscriber of microcomputer, 205, [and other subscribers at other stations] cause the installation and connection of the apparatus shown in the figures of this submission, especially Fig. 7 (and 7C); caused his microcomputer, 205, to be preprogrammed as described above; and preinformed microcomputer, 205, of his wish to view said "Wall Street Week" program by causing the aforementioned select-WSW information to be recorded at said microcomputer, 205.) Then the combined medium combining process described above in "One Combined Medium" and in examples #1, #2, #3, #4, etc. commences. And the Fig. 1C combining is displayed. But the combining of Fig. 1C is just part of a larger process. When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, the program instruction set in the first message of the "Wall Street Week" example instructs microcomputer, 205, to generate not one but a plurality overlays. The combining of Fig. 1C is merely the first.

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	Reference	Language	Reference	Language
			In general, Page 40 line 31 to page 41 line 3.	(Hereinafter, stations that originate broadcast transmissions are called "original transmission stations," stations that receive and retransmit broadcast transmissions are called "intermediate transmission stations", and stations where subscribers view programming are called "ultimate receiver stations.") At said stations, SPAM signals address, control, and coordinate diverse apparatus,....
			For example, see page 469 lines 1-2..	AUTOMATING U. R. STATIONS ... EXAMPLES #9 AND #10 CONTINUED COORDINATING COMPUTERS, TELEVISION, AND PRINT
	Column 19 lines 60-66.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, **203**, and transferred via processor, **204**, to microcomputer, **205**. This signal instructs microcomputer, **205**, to transmit the first overlay to TV set, **202**, ...	Page 25 line 33 to page 26 line 2..	Then the host says, "And here is what your portfolio did." At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205; and executed ....
			Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed to process said information automatically. Controller, 39, is preprogrammed to .... correct errors in retained received information by means of forward error correction techniques well known in the art; to convert, as may be required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; .... to identify in a predetermined fashion or fashions subscriber station apparatus to which

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			Page 26 lines 4-8.	said signal information should be transferred; and to transfer said signals to said apparatus. Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M.
said first portion of said multimedia presentation	Column 19 line 67 to column 20 line 1.	The viewer then sees a microcomputer generated graphic of his own stocks' performance ...	Page 26 lines 8-11.	TV monitor, 202M, then displays ... the microcomputer generated graphic of the subscriber's own portfolio performance ...
with said presentation of said second medium	Column 19 lines 67 to column 20 line 2.	The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 451 line 3. Page 26 lines 8-11.	And the Fig. 1C combining is displayed. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
based on determining said content, and to	Column 19 lines 17-23.	... processor or monitor, 12, which reacts, in a predetermined fashion by passing also signals that it passes to buffer/ comparator, 205, all externally to microcomputer, 205. 14. Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18. Page 267 lines 20-28 from example #5. Page 436 line 9 to page 437 line 3.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, ... All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.) Receiving said Select-WSW-Program- Unit message causes decoder, 203, ... to input ....

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				the information segment of said message to the CPU of microcomputer, 205, ... The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on-CC13...
				Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance.
				Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	... to receive the transmission of cable channel 13; ...
	Column 19 lines 27-29.	...and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."	Page 443 lines 19-24, and	Executing said additional 2nd-stage-enable-WSW-program instructions at the station of Fig. 7 causes controller, 20, first to cause the apparatus of said station to commence transferring the decrypted television information of the "Wall Street Week" program transmission to decoder, 203, and microcomputer, 205.
			page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week"

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	Column 19 lines 42-44.	Microcomputer, **205**, is preprogramed to respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programing transmission.	Page 21 lines 20-24.	program, to display the video image of said information, and to emit sound in accordance with said audio ... Microcomputer, **205**, is preprogrammed to ... respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programming transmission.
output said multimedia presentation based on	Column 19 line 64 to column 20 line 2.	This signal instructs microcomputer, **205**, to transmit the first overlay to TV set, **202**, for as long as it receives the same instruction signal from processor, **204**. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 26 lines 4-11.	... "GRAPHICS ON". Said signal instructs microcomputer, **205**, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
			Page 451 line 3.	And the Fig. 1C combining is displayed.
coordinating said presentation of said first portion of said multimedia presentation with said presentation of said second medium; and	Column 19 lines 60-66.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, **203**, and transferred via processor, **204**, to microcomputer, **205**. This signal instructs microcomputer, **205**, to transmit the first overlay to TV set, **202**, ...	Page 25 line 33 to page 26 line 2..	Then the host says, "And here is what your portfolio did." At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205; and executed ...
			Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed to process said information automatically. Controller, 39, is preprogrammed to ... correct errors in retained received information by means of forward error correction techniques well

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	Reference	Language	Reference	Language
				known in the art; to convert, as may be required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; … to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus.
			Page 26 lines 4-8.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M.
transmitting said information transmission to said receiver station	Column 12 lines 45-47.	Beyond channel combining system and multiplexer, 92, amplifier, 94, transmits programing to signal processor, 71, and signal processor, 96, …	Page 337 lines 1-8.	Fig. 6 shows particular signal processor system monitoring apparatus associated with the intermediate station of Fig. 6. In field distribution system, 93, amplifier, 94, inputs programming transmissions to signal processor system, 71, (where said transmissions are inputed to one alternate contact of the switch, 1, of the signal processor of said system, 71), and amplifier, 95, inputs programming transmissions to signal processor, 96, …
			Page 429, lines 26-32.	The program originating studio that originates the "Wall Street Week" program originates, embeds, and transmits the programming in the encrypted fashion of example #7 above, and the intermediate transmission station of Fig. 6 receives and retransmits said programming, in the fashion of example #7, on cable channel 13 which is inputed, at the station of Figs. 7 and 7C, to converter boxes, 222 and 201, and to signal processor, 200.
	Column 19 lines 17-23.	… proccssor or monitor, 12, which reacts,	Page 435 lines 16-18.	In due course, while scanning sequentially

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in a predetermined fashion by passing also externally to microcomputer, **205**, all signals that it passes to buffer/ comparator, **14**. Analyzing these identifier signals in a predetermined fashion, microcomputer, **205**, determines that "Wall Street Week" is being televised on channel X.

Instant Specification — Reference (first block): Page 267 lines 20-28 from example #5.

Instant Specification — Language (first block):

all channels in the fashion of example #5, the apparatus of the signal processor, 200, ...

All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)

Instant Specification — Reference (second block): Page 436 line 9 to page 437 line 3.

Instant Specification — Language (second block):

Receiving said Select-WSW-Program- Unit message causes decoder, 203, ... to input ... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on-CC13....

Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance.

Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW

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	Reference	Language	Reference	Language
				-on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	... to receive the transmission of cable channel 13; ...
before a specific time;	Column 20 lines 2-7.	When the two studio generated graphics are no longer displayed, the studio stops sending the instruction signal, and the microcomputer, 205, ceases transmitting its own graphic to TV set, 202, and prepares to send the next locally generated graphic overlay upon instruction from the originating studio.	Page 26 line 33 to page 27 line 9.	As the program proceeds, in the same fashion a further instruction signal is generated at said studio; transmitted; detected; inputted from decoder, 203, to microcomputer, 205; and executed as "GRAPHICS OFF." Then said studio ceases transmitting the graphic image, and transmits another image such as the host's talking head. Simultaneously, the GRAPHICS OFF command causes microcomputer, 205, to cease overlaying the graphic information onto the received composite video and to commence transmitting the received composite video transmission unmodified. Thereafter the "Wall Street Week" program proceeds, and microcomputer, 205, continues to operate under control of received instructions.
			Page 451 line 22 to page 452 line 5.	Furthermore, it is undesirable to separate computer operations merely because they result in the generation of separate overlays because such separation may result in unnecessary duplication of calculations. For example, the Fig. 1C display of user specific overall stock portfolio performance could be followed by second and third displays that analyze portions of the subscriber's portfolio--eg., the portion invested in New York Stock Exchange listed stocks in comparison to the so-called "NYSE" index and the portion invested in so-called "over-the-counter" stocks in comparison to the so-called "NASDAQ" index. In order to calculate the value of the overall portfolio, it is necessary to calculate the value of these

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				portions. To require that the values of the portions be recalculated for subsequent overlays would be inefficient. In computer-based combined medium communications, the amount of information that a given system can convey is dependent on the efficiency of the employment of program instruction sets and combining synch commands.
whereby said receiver station is enabled to output said multimedia presentation.	Column 19 line 60 to column 20 line 1.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205.	Page 25 line 34 to page 26 line 2.	At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205;
			Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed to process said information automatically. Controller, 39, is preprogrammed to … correct errors in retained received information by means of forward error correction techniques well known in the art; to convert, as may be required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; … to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus.
		This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204.	Page 26 lines 4-11.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and

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				transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic. And microcomputer, 205, commences …
		The viewer then sees a microcomputer generated graphic of his own stocks' performance …		
44. The method of claim 43, wherein said receiver station determines said content of said second medium by processing a first identifier, said method further comprising the step of	Column 19 lines 17-23.	… processor or monitor, 12, which reacts, in a predetermined fashion by passing also externally to microcomputer, 205, all signals that it passes to buffer/ comparator, 14. Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, …
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, … to input … the information segment of said message to the CPU of microcomputer, 205, … . The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said … enable-WSW-on- CC13… . Said instructions contain one instance, and … program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects*

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			Page 439 lines 14-15.	*the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20. ... to receive the transmission of cable channel 13; ...
transmitting said first identifier.	Column 12 lines 45-47.	Beyond channel combining system and multiplexer, **92**, amplifier, **94**, transmits programing to signal processor, **71**, and signal processor, **96**, ...	Page 337 lines 1-8.	Fig. 6 shows particular signal processor system monitoring apparatus associated with the intermediate station of Fig. 6. In field distribution system, 93, amplifier, 94, inputs programming transmissions to signal processor system, 71, (where said transmissions are inputed to one alternate contact of the switch, 1, of the signal processor of said system, 71), and amplifier, 95, inputs programming transmissions to signal processor, 96, ...
	Column 19 lines 14-15.	... pass all program and channel identifiers on all programing being cablecast on the multi-channel system.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, of the station of Fig. 7 and 7C ....
			Page 248 lines 22-26 from example #5.	Via a conventional multi- channel cable transmission, in a fashion well known in the art, four channels of conventional television programming and two conventional FM radio signals are inputed to a first alternate contact of switch, 1, and to mixer, 2.

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			Page 250 lines 13-16 from example #5.	Example #5 begins with the embedding and transmitting, at the remote station that originates the "Wall Street Week" broadcast, of the first message of the "Wall Street Week" program …
			Page 252 lines 15-35 from example #5.	Then, in a predetermined fashion, control processor, 39J, determines that said first command contains subject matter meter-monitor information causing said control processor, 39J, to transmit a message that consists of … execution segment information that is addressed to microcomputer, 205, (and that causes microcomputer, 205, to process the information of the meter- monitor segment immediately following said execution segment information as new programming now being transmitted on the channel of the channel mark of said meter-monitor segment segment) then meter-monitor segment information that includes the **"program unit identification code"** and subject matter information of said **first command and the channel mark of cable channel 13** … (Said message whose transmission is caused by receiving said first command enables microcomputer, 205, in a fashion described more fully below, to tune automatically to receive the program that said "program unit identification code" identifies if said program is of interest, …
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new-program-message (#5) and the 1st-new-radio-program- message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands

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				are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 429, lines 26-32.	The program originating studio that originates the "Wall Street Week" program originates, embeds, and transmits the programming in the encrypted fashion of example #7 above, and the intermediate transmission station of Fig. 6 receives and retransmits said programming, in the fashion of example #7, on cable channel 13 which is inputted, at the station of Figs. 7 and 7C, to converter boxes, 222 and 201, and to signal processor, 200.
45. The method of claim 44, further comprising the step of including said first identifier in said information transmission.	Column 19 lines 14-15.	... pass all program and channel identifiers on all programing being cablecast on the multi-channel system.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, of the station of Fig. 7 and 7C ....
			Page 248 lines 22-26 from example #5.	Via a conventional multi- channel cable transmission, in a fashion well known in the art, four channels of conventional television programming and two conventional FM radio signals are inputted to a first alternate contact of switch, 1, and to mixer, 2.
			Page 250 lines 13-16 from example #5.	Example #5 begins with the embedding and transmitting, at the remote station that originates the "Wall Street Week" broadcast, of the first message of the "Wall Street Week" program ...
			Page 252 lines 15-35 from example #5.	Then, in a predetermined fashion, control processor, 39J, determines that said first command contains subject matter meter-monitor information causing said control processor, 39J, to transmit a message that consists of ... execution segment

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				information that is addressed to microcomputer, 205, (and that causes microcomputer, 205, to process the information of the meter- monitor segment immediately following said execution segment information as new programming now being transmitted on the channel of the channel mark of said meter-monitor segment segment) then meter-monitor segment information that includes the "**program unit identification code**" and subject matter information of said first command and **the channel mark of cable channel 13** … (Said message whose
			Page 267 lines 20-28 from example #5.	transmission is caused by receiving said first command enables microcomputer, 205, in a fashion described more fully below, to tune automatically to receive the program that said "program unit identification code" identifies if said program is of interest, … All eight of said messages are commands. The 1st- and 3rd-new-program-message (#5) and the 1st-new-radio-program- message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 431 line 26 to page 432 line 18, and	Executing said incorporate-and-retain-Select-WSW- Program-Unit-SPAM-message instructions causes said computer, 73, to generate particular please-fully-enable-WSW-on-CC13- at-particular-8:30 information and a particular Select-WSW- Program-Unit SPAM message

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				and to retain said message at particular Select-Program-Unit-Message-to-Transmit memory. Automatically, said computer, 73, generates said please-fully-enable-WSW-on-CC13-at-particular-8:30 information by replacing the information of particular variables, XXXX and YYYYYYYYYYYYYY, in said generally applicable please-fully-enable-WSW-on-XXXX-at-YYYYYYYYYYYY information with said CC13 and said particular-8:30 information that are preprogrammed at said computer, 73, and that reflect that the schedule of the intermediate station of said computer, 73. Said Select-WSW-Program-Unit message consists of an "01" header; an execution segment of information that is identical to the aforementioned available-television-program information; a meter-monitor segment that consists of the meter-monitor information of said Prepare-To-Retransmit-WSW message plus information that identifies said intermediate station (the format information of said meter-monitor information being modified to reflect the addition of said information that identifies said station); appropriate padding bits; an information segment of generally applicable determine-whether-to-select instructions of said Transmit- Select-WSW message that contain said particular specific-WSW information and said please-fully-enable-WSW-on-CC13-at-particular-8:30 information; and an end of file signal.
				In due course, executing said timing instructions causes the computer, 73, of the station of Fig. 6 to commence transmitting the SPAM message at its particular

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			Page 434 lines 27-33.	Select-Program-Unit-Message-to-Transmit memory, which is its station specific Select-WSW-Program-Unit SPAM message, embedded in the normal transmission location of cable channel 13.
46. The method of claim 45, wherein said receiver station processes a portion of said first medium based on a second identifier, said method further comprises the step of	*In general* Column 18 lines 48-55.	Several separate news services transmit news on different channels carried on the multi-channel cable transmission to converter boxes, 222 and 201, and to signal processor, 200. The news services preceed each news transmission with a unique signal that uniquely identifies the company or companies to which the news item refers and/or the industries.	*In general* Page 420 line 21 to page 421 line 7.	Two remote stations--remote news-service-A station and remote news-service-B station--transmit, from geographically separate locations, two different broadcast print transmissions. The intermediate transmission station of Fig. 6 receives and retransmits information the transmissions of said remote stations on digital data channels A and B, respectively, that are inputted to converter boxes, 222 and 201, and to signal processor, 200. Each remote station transmits each particular news item within the particular format of a Transmit-News-Item SPAM message, and receiving any given message in a Transmit-News-Item SPAM message ... In due course, said remote news-service-A station ...
	For example Column 19 lines 35-41.	Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that **relate** to the stocks in its stored portfolio.	*For example* Page 449 lines 13-35.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which

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				remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.) Alternatively, microcomputer, 205, is caused in a predetermined fashion (for example, by a SPAM message a given transmission monitored by signal processor, 200, in any of the above described fashions) automatically to telephone a remote data service computer, by means of network, 262, in a fashion well known in the art, and to cause said remote computer to select and transmit the particular closing price datum or data of the stock or stocks of the portfolio of said microcomputer, 205, thereby causing said microcomputer, 205, to record said datum or data in a predetermined fashion.
transmitting said second identifier.	Column 12 lines 45-47.	Beyond channel combining system and multiplexer, 92, amplifier, 94, transmits programing to signal processor, 71, and signal processor, 96, ...	Page 337 lines 1-8.	Fig. 6 shows particular signal processor system monitoring apparatus associated with the intermediate station of Fig. 6. In field distribution system, 93, amplifier, 94, inputs programming transmissions to signal processor system, 71, (where said transmissions are inputted to one alternate contact of the switch, 1, of the signal processor of said system, 71), and amplifier, 95, inputs programming transmissions to signal processor, 96, ...
	In general Column 18 lines 48-55.	Several separate news services transmit news on different channels carried on the multi-channel cable transmission to converter boxes, 222 and 201, and to signal processor, 200. The news services preceed each news transmission with a unique signal that uniquely identifies the company or companies to which the news item refers and/or the industries.	*In general* Page 420 line 21 to page 421 line 7.	Two remote stations--remote news-service-A station and remote news-service-B station--transmit, from geographically separate locations, two different broadcast print transmissions. The intermediate transmission station of Fig. 6 receives and retransmits information the transmissions of said remote stations on digital data channels A and B, respectively, that are inputted to converter boxes, 222 and 201, and

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				to signal processor, 200. Each remote station transmits each particular news item within the particular format of a Transmit-News-Item SPAM message, and receiving any given message in a Transmit-News-Item SPAM message … In due course, said remote news-service-A station ….
	For example Column 19 lines 35-41.	Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that **relate** to the stocks in its stored portfolio.	*For example* Page 449 lines 13-35.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.) Alternatively, microcomputer, 205, is caused in a predetermined fashion (for example, by a SPAM message a given transmission monitored by signal processor, 200, in any of the above described fashions) automatically to telephone a remote data service computer, by means of network, 262, in a fashion well known in the art, and to cause said remote computer to select and transmit the particular closing price datum or data of the stock or stocks of the portfolio of said microcomputer, 205, thereby causing said microcomputer, 205, to record said datum or data in a predetermined fashion.

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47. The method of claim 46, wherein said receiver station commences storing said portion of said first medium at a particular time, said method further comprising the step of	Column 19 lines 39-41.	[Microcomputer, 205,] records those prices that relate to the stocks in its stored portfolio.	Page 449 lines 13-20.	Each weekday after after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer.
transmitting said portion of said first medium to said receiver station before said particular time.	Column 12 lines 45-47.	Beyond channel combining system and multiplexer, 92, amplifier, 94, transmits programing to signal processor, 71, and signal processor, 96, …	Page 337 lines 1-8.	Fig. 6 shows particular signal processor system monitoring apparatus associated with the intermediate station of Fig. 6. In field distribution system, 93, amplifier, 94, inputs programming transmissions to signal processor system, 71, (where said transmissions are inputted to one alternate contact of the switch, 1, of the signal processor of said system, 71), and amplifier, 95, inputs programming transmissions to signal processor, 96, …
	In general Column 18 lines 48-55.	Several separate news services transmit news on different channels carried on the multi-channel cable transmission to converter boxes, 222 and 201, and to signal processor, 200. The news services preceed each news transmission with a unique signal that uniquely identifies the company or companies to which the news item refers and/or the industries.	*In general* Page 420 line 21 to page 421 line 7.	Two remote stations--remote news-service-A station and remote news-service-B station--transmit, from geographically separate locations, two different broadcast print transmissions. The intermediate transmission station of Fig. 6 receives and retransmits information the transmissions of said remote stations on digital data channels A and B, respectively, that are inputted to converter boxes, 222 and 201, and to signal processor, 200. Each remote station transmits each particular news item within the particular format of a Transmit-News-Item SPAM message, and receiving any given message in a Transmit-

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				News-Item SPAM message … In due course, said remote news-service-A station …
	For example Column 19 lines 35-41.	Each weekday, microcomputer, **205**, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.	*For example* Page 449 lines 13-35.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.) Alternatively, microcomputer, 205, is caused in a predetermined fashion (for example, by a SPAM message a given transmission monitored by signal processor, 200, in any of the above described fashions) automatically to telephone a remote data service computer, by means of network, 262, in a fashion well known in the art, and to cause said remote computer to select and transmit the particular closing price datum or data of the stock or stocks of the portfolio of said microcomputer, 205, thereby causing said microcomputer, 205, to record said datum or data in a predetermined fashion.
48. The method of claim 43, wherein said	Column 19 lines 27-29.	…and also microcomputer, **205**, may instruct switch, **216**, to turn TV set, **202**, on	Page 445 line 24 to page 446 line 1.	… instructions causes controller, 20, to switch power on to monitor, 202M, and commence

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receiver station is controlled,		and tuner, **215**, to tune appropriately to "Wall Street Week."		transferring the television output transmission of microcomputer, 205, to said monitor, 202M; ... Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, and to tune monitor, 202M, in a predetermined fashion.
			Page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio ...
based on said first identifier,	Column 19 lines 17-23.	... processor or monitor, **12**, which reacts, in a predetermined fashion by passing also externally to microcomputer, **205**, all signals that it passes to buffer/comparator, **14**. Analyzing these identifier signals in a predetermined fashion, microcomputer, **205**, determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, ...
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, ... to input ... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on-

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				CC13... Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. 　Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	... to receive the transmission of cable channel 13; ...
	Column 19 lines 27-29.	...and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."	Page 443 lines 19-24, and	Executing said additional 2nd-stage-enable-WSW-program instructions at the station of Fig. 7 causes controller, 20, first to cause the apparatus of said station to commence transferring the decrypted television information of the "Wall Street Week" program transmission to decoder, 203, and microcomputer, 205.
			page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio ....
to respond to	Column 19 lines 42-44.	Microcomputer, 205, is preprogramed to respond in a predetermined fashion to	Page 21 lines 20-24.	Microcomputer, 205, is preprogrammed to ... respond in a predetermined fashion to

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		instruction signals embedded in the "Wall Street Week" programing transmission.		instruction signals embedded in the "Wall Street Week" programming transmission.
a processor instruction which is received at said receiver station separately from said first identifier, said method further comprising the step of	Column 19 lines 60 to page 20 line 2.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205. This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 25 line 34 to page 26 line 2.	At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205; ...
			Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed ... to correct errors ... by means of forward error correction techniques well known in the art; to convert, as may be required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; ... to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus
			Page 26 lines 4-11.	... Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
			Page 451 line 3.	And the Fig. 1C combining is displayed.

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including said processor instruction in said information transmission.	Column 19 lines 43-44.	... instruction signals embedded in the "Wall Street Week" programing transmission.	Page 21 lines 23-24.	... instruction signals embedded in the "Wall Street Week" programming transmission.
	Column 19 lines 60-63.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission.	Page 59 lines 29-33.	A SPAM message is the modality whereby the original transmission station that originates said message controls specific addressed apparatus at subscriber stations. The information of any given SPAM transmission consists of a series or stream of sequentially transmitted SPAM messages.
			Page 25 line 34 to page 26 line 1.	At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted.
			Page 90 lines 4-7. Applicants teach this as the composition of the instruction signal of page 25 line 34. See page 26 lines 1-4 and page 89 lines 3-6, and page 90 lines 4-11.	The second message is of the information associated with the second combining synch command. Said second command has a "00" header, an execution segment, and a meter-monitor ...
49. The method of claim 48, further comprising the step of transmitting said processor instruction from said transmitter station to said receiver station	Column 12 lines 45-47.	Beyond channel combining system and multiplexer, 92, amplifier, 94, transmits programing to signal processor, 71, and signal processor, 96, ...	Page 337 lines 1-8.	Fig. 6 shows particular signal processor system monitoring apparatus associated with the intermediate station of Fig. 6. In field distribution system, 93, amplifier, 94, inputs programming transmissions to signal processor system, 71, (where said transmissions are inputted to one alternate contact of the switch, 1, of the signal processor of said system, 71), and amplifier, 95, inputs programming transmissions to signal processor, 96, ...
	Column 19 lines 63-66.	This signal is identified by decoder, 203,	Page 26 lines 1-8.	Said signal is identified by decoder, 203;

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		and transferred via processor, 204, to microcomputer, 205. This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202,		transferred to microcomputer, 205; and executed by microcomputer, 205, at the system level as the statement, "GRAPHICS ON". Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M.
			Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed … to correct errors … by means of forward error correction techniques well known in the art; to convert, as may be required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; … to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus …
at said specific time.	Column 19 lines 59-60.	**Then** the host says, "And here is what your portfolio did."	Page 25 lines 33-34.	**Then** the host says, "And here is what your portfolio did."
	Column 19 lines 60-63.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission.	Page 59 lines 29-33.	A SPAM message is the modality whereby the original transmission station that originates said message controls specific addressed apparatus at subscriber stations. The information of any given SPAM transmission consists of a series or stream of sequentially transmitted SPAM messages.
			Page 25 line 34 to page 26 line 1.	At this point, an instruction signal is generated at said program originating studio, embedded

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				in the programming transmission, and transmitted.
			Page 90 lines 4-7. Applicants teach this as the composition of the instruction signal of page 25 line 34. See page 26 lines 1-4 and 20-28, page 89 lines 3-6, and page 90 lines 4-11.	The second message is of the information associated with the second combining synch command. Said second command has a "00" header, an execution segment, and a meter-monitor ….

Claim 50 is cancelled.

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51. A transmitter apparatus for enabling	Column 10 lines 15-20.	The signal processing apparatus outlined in FIGS. 1, A, 2B, and 2C, and their variants as appropriate, can be used to automate the operations of an intermediate transmission point whether it be a broadcast station transmitting only a single channel of programing or a cable system cablecasting many channels.	Page 324 lines 8-17.	The signal processing apparatus outlined in Figs. 2, 2A, 2B, 2C, and 2D, and their variants as appropriate, can be used to automate the operations of intermediate transmission stations that receive and retransmit programming. The stations so automated may transmit any form of electronically transmitted programming, including television, radio, print, data, and combined medium programming and may range in scale of operation from wireless broadcast stations that transmit a single programming transmission to cable systems that cablecast many channels simultaneously.
a receiver station to	Column 17 lines 47-53.	FIG 6 illustrates one possible configuration of equipment in a home or office or other television and/or radio receiving site. Consideration of FIGS. 6F and 6G is facilitated by consideration, first, of individual examples of the types of co-ordinated presentations that the signal apparatus and methods described here can permit.	Page 390 lines 30-35.	Fig. 7 exemplifies one embodiment of an ultimate receiver station; is a subscriber station in the field distribution system, 93, of the intermediate transmission station of Fig. 6; and may be a home, an office, a theater, a hotel, or any other station where programming such as television or radio is displayed to persons.
			Page 396 lines 8-10.	Features, benefits, and modes of operation of

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				the station of Fig. 7 are demonstrated in the following individual examples.
output a multimedia presentation, said receiver station adapted to	Column 19 lines 60 to page 20 line 2.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, **203**, and transferred via processor, **204**, to microcomputer, **205**. This signal instructs microcomputer, **205**, to transmit the first overlay to TV set, **202**, for as long as it receives the same instruction signal from processor, **204**. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 25 line 34 to page 26 line 2.	At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205; ...
			Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed … to correct errors … by means of forward error correction techniques well known in the art; to convert, as may be required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; … to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus ...
			Page 26 lines 4-11.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
			Page 451 line 3.	And the Fig. 1C combining is displayed.

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	Column 19 lines 31-34.	FIG **6C** can also illustrate how programing delivered at different times to one place can be co-ordinated to give a multimedia presentation at one time in one place.	Page 18 lines 24-27.	Fig. 7C is a block diagram of signal processing apparatus and methods selecting receivable information and programming and controlling combined medium, multi-channel presentations.
			page 450 line 27 to page 451 line 11.	(To accomplish all this has required only that the subscriber of microcomputer, 205, [and other subscribers at other stations] cause the installation and connection of the apparatus shown in the figures of this submission, especially Fig. 7 (and 7C), caused his microcomputer, 205, to be preprogrammed as described above; and preinformed microcomputer, 205, of his wish to view said "Wall Street Week" program by causing the aforementioned select-WSW information to be recorded at said microcomputer, 205.) Then the combined medium combining process described above in "One Combined Medium" and in examples #1, #2, #3, #4, etc. commences. And the Fig. 1C combining is displayed. But the combining of Fig. 1C is just part of a larger process. When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, the program instruction set in the first message of the "Wall Street Week" example instructs microcomputer, 205, to generate not one but a plurality overlays. The combining of Fig. 1C is merely the first.
receive a plurality of signals,	Column 19 lines 27-29.	...and also microcomputer, **205**, may instruct switch, **216**, to turn TV set, **202**, on and tuner, **215**, to tune appropriately to "Wall Street Week."	Page 445 line 24 to page 446 line 1.	... instructions causes controller, 20, to switch power on to monitor, 202M, and commence transferring the television output transmission of microcomputer, 205, to said monitor, 202M; ... Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M,

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			Page 446 lines 17-21.	and to tune monitor, 202M, in a predetermined fashion. In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio …
	Column 19 lines 35-37.	Each weekday, microcomputer, **205**, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day.	Page 449 lines 13-26.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.)
store a first	Column 19 lines 35-41.	Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It **records** those prices that relate to the stocks in its stored portfolio.	Page 449 lines 13-35.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber

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				stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.) Alternatively, microcomputer, 205, is caused in a predetermined fashion (for example, by a SPAM message a given transmission monitored by signal processor, 200, in any of the above described fashions) automatically to telephone a remote data service computer, by means of network, 262, in a fashion well known in the art, and to cause said remote computer to select and transmit the particular closing price datum or data of the stock or stocks of the portfolio of said microcomputer, 205, thereby causing said microcomputer, 205, to record said datum or data in a predetermined fashion.
medium	In general, Column 3 lines 48-56. For example, see "One Digital Data Ch."	Another method has application at receiver sites such as private homes or public places like theaters, hotels, brokerage offices, etc., whether commercial establishments or not. This method provides techniques whereby, automatically, single channel, single medium presentations, be they television, radio, or other electronic transmissions, may be recorded, co-ordinated in time with other programing previously transmitted and recorded, or processed in other fashions. [See Fig. 6C.]	In general, Page 86 lines 12-14. For example, see "One Digital Data Channel," or, Page 85 lines 33-35.	(Hereinafter, the preferred normal location for transmitting signals in any given communication medium is called, the "normal transmission location".) [See Fig. 7C] In broadcast print or data communications, the preferred normal transmission location for SPAM signals is in the same location as the conventional information.
to provide a first portion of said multimedia presentation,	Column 19 line 64 to column 20 line 1.	This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204.	Page 26 lines 4-10.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and

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		The viewer then sees a microcomputer generated graphic of his own stocks' performance …		transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the …
determine content of a second medium,	Column 19 lines 17-23.	… processor or monitor, 12, which reacts, in a predetermined fashion by passing also externally to microcomputer, 205, all signals that it passes to buffer/ comparator, 14. Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, …
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, … to input … the information segment of said message to the CPU of microcomputer, 205, … The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said … enable-WSW-on-CC13… Said instructions contain one instance, and … program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.*

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				Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance.
				Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	... to receive the transmission of cable channel 13; ...
coordinate presentation of	Column 19 lines 31-34.	FIG 6C can also illustrate how programing delivered at different times to one place can be co-ordinated to give a multimedia presentation at one time in one place.	Page 18 lines 24-27.	Fig. 7C is a block diagram of signal processing apparatus and methods selecting receivable information and programming and controlling combined medium, multi-channel presentations.
			page 450 line 27 to page 451 line 11.	(To accomplish all this has required only that the subscriber of microcomputer, 205, [and other subscribers at other stations] cause the installation and connection of the apparatus shown in the figures of this submission, especially Fig. 7 (and 7C); caused his microcomputer, 205, to be preprogrammed as described above; and preinformed microcomputer, 205, of his wish to view said "Wall Street Week" program by causing the aforementioned select-WSW information to be recorded at said microcomputer, 205.) Then the combined medium combining process described above in "One Combined Medium" and in examples #1, #2, #3, #4, etc. commences. And the Fig. 1C combining is displayed. But the combining of Fig. 1C is just part of a larger process. When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, the

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				program instruction set in the first message of the "Wall Street Week" example instructs microcomputer, 205, to generate not one but a plurality overlays. The combining of Fig. 1C is merely the first.
			In general, Page 40 line 31 to page 41 line 3.	(Hereinafter, stations that originate broadcast transmissions are called "original transmission stations," stations that receive and retransmit broadcast transmissions are called "intermediate transmission stations", and stations where subscribers view programming are called "ultimate receiver stations.") At said stations, SPAM signals address, control, and coordinate diverse apparatus,.....
			For example, see page 469 lines 1-2.	AUTOMATING U. R. STATIONS ... EXAMPLES #9 AND #10 CONTINUED COORDINATING COMPUTERS, TELEVISION, AND PRINT
	Column 19 lines 60-66.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205. This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, ...	Page 25 line 33 to page 26 line 2..	Then the host says, "And here is what your portfolio did." At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205; and executed ...
			Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed to process said information automatically. Controller, 39, is preprogrammed to ... correct errors in retained received information by means of forward error correction techniques well known in the art; to convert, as may be required, the corrected information, by means

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			Page 26 lines 4-8.	of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; ... to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus. Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M.
said first portion of said multimedia presentation	Column 19 line 67 to column 20 line 1.	The viewer then sees a microcomputer generated graphic of his own stocks' performance ...	Page 26 lines 8-11.	TV monitor, 202M, then displays ... the microcomputer generated graphic of the subscriber's own portfolio performance ...
with a presentation of said second medium	Column 19 lines 67 to column 20 line 2.	The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 451 line 3. Page 26 lines 8-11.	And the Fig. 1C combining is displayed. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
based on determining said content, and	Column 19 lines 17-23.	... processor or monitor, 12, which reacts, in a predetermined fashion by passing also externally to microcomputer, 205, all signals that it passes to buffer/comparator, 14. Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18. Page 267 lines 20-28 from example #5.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, ... All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can

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				guide station control apparatus to desired programming.)
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, ... to input ... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputed is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on-CC13... Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	... to receive the transmission of cable channel 13; ...
	Column 19 lines 27-29.	...and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."	Page 445 line 24 to page 446 line 1.	... instructions causes controller, 20, to switch power on to monitor, 202M, and commence transferring the television output transmission of microcomputer, 205, to said monitor, 202M; ... Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder,

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			Page 446 lines 17-21.	145, to switch power on to monitor, 202M, and to tune monitor, 202M, in a predetermined fashion. In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio ….
	Column 19 lines 42-44.	Microcomputer, **205**, is preprogramed to respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programing transmission.	Page 21 lines 20-24.	Microcomputer, 205, is preprogrammed to … respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programing transmission.
output said multimedia presentation	Column 19 line 64 to column 20 line 2.	This signal instructs microcomputer, **205**, to transmit the first overlay to TV set, **202**, for as long as it receives the same instruction signal from processor, **204**. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 26 lines 4-11.	… "GRAPHICS ON". Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
			Page 451 line 3.	And the Fig. 1C combining is displayed.
based on coordinating said presentation of said first portion of said multimedia presentation with said presentation of said second medium, said transmitter apparatus comprising:	Column 19 lines 60-66.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, **203**, and transferred via processor, **204**, to microcomputer, **205**. This signal instructs microcomputer, **205**, to transmit the first overlay to TV set, **202**, …	Page 25 line 33 to page 26 line 2. Page 37 line 26 to page 38 line 8.	Then the host says, "And here is what your portfolio did." At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205; and executed … In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38,

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				43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed to process said information automatically. Controller, 39, is preprogrammed to ... correct errors in retained received information by means of forward error correction techniques well known in the art; to convert, as may be required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; ... to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus.
			Page 26 lines 4-8.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M.
a receiver for receiving	Column 10 lines 30-39.	The facility receives programing from many sources. Transmissions may be received from satellites by satellite antenna, 50, low noise amplifiers, 51 and 52, and TV receivers, 53, 54, 55, and 56. Microwave transmissions can be received by microwave antenna, 57, and television video and audio receivers, 58 and 59. Conventional TV broadcast transmissions can be received by antenna, 60, and TV demodulator, 61. Other electronic programing input means, 62, can receive programing transmissions.	Page 324 lines 23-31.	The station receives programming from many sources. Transmissions are received from a satellite by satellite antenna, 50, low noise amplifiers, 51 and 52, and TV receivers, 53, 54, 55, and 56. Microwave transmissions are received by microwave antenna, 57, and television video and audio receivers, 58 and 59. Conventional TV broadcast transmissions are received by antenna, 60, and TV demodulator, 61. Other electronic programming transmissions are received by other programming input means, 62.
a first of said plurality of signals,	Column 19 lines 60-63.	At this point, an instruction signal is generated in the television studio originating the programing and is	Page 59 lines 29-33.	A SPAM message is the modality whereby the original transmission station that originates said message controls specific addressed

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		transmitted in the programing transmission.		apparatus at subscriber stations. The information of any given SPAM transmission consists of a series or stream of sequentially transmitted SPAM messages.
			Page 25 line 34 to page 26 line 1.	At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted.
			Page 90 lines 4-7. Applicants teach this as the composition of the instruction signal of page 25 line 34. See page 26 lines 1-4 and page 89 lines 3-20-28, page 89 lines 3-6, and page 90 lines 4-11.	The second message is of the information associated with the second combining synch command. Said second command has a "00" header, an execution segment, and a meter-monitor …
wherein said first of said plurality of signals is adapted to cause said receiver station to	Column 19 lines 14-15.	… pass all program and channel identifiers on all programing being cablecast on the multi-channel system.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, of the station of Fig. 7 and 7C ….
			Page 248 lines 22-26 from example #5.	Via a conventional multi-channel cable transmission, in a fashion well known in the art, four channels of conventional television programming and two conventional FM radio signals are inputed to a first alternate contact of switch, 1, and to mixer, 2.
			Page 250 lines 13-16 from example #5.	Example #5 begins with the embedding and transmitting, at the remote station that originates the "Wall Street Week" broadcast, of the first message of the "Wall Street Week" program …
			Page 252 lines 15-35 from example #5.	Then, in a predetermined fashion, control processor, 39J, determines that said first command contains subject matter

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				meter-monitor information causing said control processor, 39J, to transmit a message that consists of … execution segment information that is addressed to microcomputer, 205, (and that causes microcomputer, 205, to process the information of the meter- monitor segment immediately following said execution segment information as new programming now being transmitted on the channel of the channel mark of said meter-monitor segment segment) then meter-monitor segment information that includes the **"program unit identification code"** and subject matter information of said first command and **the channel mark of cable channel 13** … (Said message whose transmission is caused by receiving said first command enables microcomputer, 205, in a fashion described more fully below, to tune automatically to receive the program that said "program unit identification code" identifies if said program is of interest, …
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new-program-message (#5) and the 1st-new-radio-program- message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
	Column 19 lines 43-44.	… instruction signals embedded in the "Wall Street Week" programing transmission.	Page 21 lines 23-24.	… instruction signals embedded in the "Wall Street Week" programming transmission.
determine said content	Column 19 lines 17-23.	… processor or monitor, 12, which reacts,	Page 435 lines 16-18.	In due course, while scanning sequentially

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of said second medium, to		in a predetermined fashion by passing also externally to microcomputer, **205**, all signals that it passes to buffer/ comparator, **205**, determines that "Wall Street Week" is being televised on channel X.	Page 267 lines 20-28 from example #5.	all channels in the fashion of example #5, the apparatus of the signal processor, 200, … All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, … to input … the information segment of said message to the CPU of microcomputer, 205, … The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said … enable-WSW-on- CC13… Said instructions contain one instance, and … program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW

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			Page 439 lines 14-15.	-on-CC13-at-particular- 8:30 information to the controller, 20. ... to receive the transmission of cable channel 13; ...
coordinate said presentation of	Column 19 lines 31-34.	FIG 6C can also illustrate how programing delivered at different times to one place can be co-ordinated to give a multimedia presentation at one time in one place.	Page 18 lines 24-27.	Fig. 7C is a block diagram of signal processing apparatus and methods selecting receivable information and programming and controlling combined medium, multi-channel presentations.
			page 450 line 27 to page 451 line 11.	(To accomplish all this has required only that the subscriber of microcomputer, 205, [and other subscribers at other stations] cause the installation and connection of the apparatus shown in the figures of this submission, especially Fig. 7 (and 7C); caused his microcomputer, 205, to be preprogrammed as described above; and preinformed microcomputer, 205, of his wish to view said "Wall Street Week" program by causing the aforementioned select-WSW information to be recorded at said microcomputer, 205.) Then the combined medium combining process described above in "One Combined Medium" and in examples #1, #2, #3, #4, etc. commences. And the Fig. 1C combining is displayed. But the combining of Fig. 1C is just part of a larger process. When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, the program instruction set in the first message of the "Wall Street Week" example instructs microcomputer, 205, to generate not one but a plurality overlays. The combining of Fig. 1C is merely the first.
			In general, Page 40 line 31 to page	(Hereinafter, stations that originate broadcast transmissions are called "original transmission

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			41 line 3.	stations," stations that receive and retransmit broadcast transmissions are called "intermediate transmission stations", and stations where subscribers view programming are called "ultimate receiver stations.") At said stations, SPAM signals address, control, and coordinate diverse apparatus,....
			For example, see page 469 lines 1-2.	AUTOMATING U. R. STATIONS ... EXAMPLES #9 AND #10 CONTINUED COORDINATING COMPUTERS, TELEVISION, AND PRINT
	Column 19 lines 60-66.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205. This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, ...	Page 25 line 33 to page 26 line 2..	Then the host says, "And here is what your portfolio did." At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205; and executed ...
			Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed to process said information automatically. Controller, 39, is preprogrammed to ... correct errors in retained received information by means of forward error correction techniques well known in the art; to convert, as may be required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; ... to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus.

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			Page 26 lines 4-8.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M.
said first portion of said multimedia presentation	Column 19 line 67 to column 20 line 1.	The viewer then sees a microcomputer generated graphic of his own stocks' performance …	Page 26 lines 8-11.	TV monitor, 202M, then displays … the microcomputer generated graphic of the subscriber's own portfolio performance …
with said presentation of said second medium	Column 19 lines 67 to column 20 line 2.	The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 451 line 3.	And the Fig. 1C combining is displayed.
			Page 26 lines 8-11.	TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
based on determining said content, and to	Column 19 lines 17-23.	… processor or monitor, 12, which reacts, in a predetermined fashion by passing also externally to microcomputer, 205, all signals that it passes to buffer/comparator, 14. Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, …
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, … to input … the information segment of said message to the CPU of microcomputer, 205, … The information so inputted is the aforementioned

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				determine-whether- to-select instructions that contain said particular specific-WSW information and said … enable-WSW-on-CC13…
				Said instructions contain one instance, and … program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance.
				Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	… to receive the transmission of cable channel 13; …
	Column 19 lines 27-29.	…and also microcomputer, **205**, may instruct switch, **216**, to turn TV set, **202**, on and tuner, **215**, to tune appropriately to "Wall Street Week."	Page 445 line 24 to page 446 line 1 .	… instructions causes controller, 20, to switch power on to monitor, 202M, and commence transferring the television output transmission of microcomputer, 205, to said monitor, 202M; … Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, and to tune monitor, 202M, in a predetermined fashion.
			Page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said

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	Column 19 lines 42-44.	Microcomputer, 205, is preprogramed to respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programing transmission.	Page 21 lines 20-24.	information, and to emit sound in accordance with said audio ... Microcomputer, 205, is preprogrammed to ... respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programming transmission.
output said multimedia presentation	Column 19 line 64 to column 20 line 2.	This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 26 lines 4-11. Page 451 line 3.	..."GRAPHICS ON". Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic. And the Fig. 1C combining is displayed.
based on coordinating said presentation of said first portion of said multimedia presentation with said presentation of said second medium;	Column 19 lines 60-66.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205. This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, ...	Page 25 line 33 to page 26 line 2.. Page 37 line 26 to page 38 line 8.	Then the host says, "And here is what your portfolio did." At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205; and executed ... In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed to process said information automatically. Controller, 39, is preprogrammed to ... correct errors in retained received information by means of forward error correction techniques well known in the art; to convert, as may be

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				required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; ... to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus.
			Page 26 lines 4-8.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M.
a transmitter operatively connected to said receiver for transmitting said first of said plurality of signals to said receiver station	Column 10 lines 15-20.	The signal processing apparatus outlined in FIGS. 1, A, 2B, and 2C, and their variants as appropriate, can be used to automate the operations of an intermediate transmission point whether it be a broadcast station transmitting only a single channel of programing or a cable system cablecasting many channels.	Page 324 lines 8-17.	The signal processing apparatus outlined in Figs. 2, 2A, 2B, 2C, and 2D, and their variants as appropriate, can be used to automate the operations of intermediate transmission stations that receive and retransmit programming. The stations so automated may transmit any form of electronically transmitted programming, including television, radio, print, data, and combined medium programming and may range in scale of operation from wireless broadcast stations that transmit a single programming transmission to cable systems that cablecast many channels simultaneously.
	For example Column 10 lines 24-28.	FIGS. 3A, 3B and 3C illustrates one instance of such use. FIGS. 3A, 3B, and 3C illustrate the use of Signal Processing Apparatus and Methods at a cable television system "head end" transmission facility that cablecasts several channels of television programing.	*For example* Page 324 lines 18-21.	Fig. 6 illustrates Signal Processing Apparatus and Methods at an intermediate transmission station that is a cable television system "head end" and that cablecasts several channels of television programming.
	Column 12 lines 45-47.	Beyond channel combining system and multiplexer, **92**, amplifier, **94**, transmits	Page 337 lines 1-8.	Fig. 6 shows particular signal processor system monitoring apparatus associated with

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			programing to signal processor, **71**, and signal processor, **96**, ...		the intermediate station of Fig. 6. In field distribution system, 93, amplifier, 94, inputs programming transmissions to signal processor system, 71, (where said transmissions are inputted to one alternate contact of the switch, 1, of the signal processor of said system, 71), and amplifier, 95, inputs programming transmissions to signal processor, 96, ...
		Column 19 lines 17-23.	... processor or monitor, **12**, which reacts, in a predetermined fashion by passing also externally to microcomputer, **205**, all signals that it passes to buffer/ comparator, **14**. Analyzing these identifier signals in a predetermined fashion, microcomputer, **205**, determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, ...
				Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
				Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, ... to input .... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on-CC13....
					Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects*

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				the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted. Automatically, microcomputer, 205, compares said one instance to said **program-unit-of-interest information and determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	... to receive the transmission of cable channel 13; ...
before a specific time.	Column 20 lines 2-7.	When the two studio generated graphics are no longer displayed, the studio stops sending the instruction signal, and the microcomputer, 205, ceases transmitting its own graphic to TV set, 202, and prepares to send the next locally generated graphic overlay upon instruction from the originating studio.	Page 26 line 33 to page 27 line 9.	As the program proceeds, in the same fashion a further instruction signal is generated at said studio; transmitted; detected; inputted from decoder, 203, to microcomputer, 205; and executed as "GRAPHICS OFF." Then said studio ceases transmitting the graphic image, and transmits another image such as the host's talking head. Simultaneously, the GRAPHICS OFF command causes microcomputer, 205, to cease overlaying the graphic information onto the received composite video and to commence transmitting the received composite video transmission unmodified. Thereafter the "Wall Street Week" program proceeds, and microcomputer, 205, continues to operate under control of received instructions.
			Page 451 line 22 to page 452 line 5.	Furthermore, it is undesirable to separate computer operations merely because they result in the generation of separate overlays because such separation may result in unnecessary duplication of calculations. For example, the Fig. 1C display of user specific

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				overall stock portfolio performance could be followed by second and third displays that analyze portions of the subscriber's portfolio--eg., the portion invested in New York Stock Exchange listed stocks in comparison to the so-called "NYSE" index and the portion invested in so-called "over-the-counter" stocks in comparison to the so-called "NASDAQ" index. In order to calculate the value of the overall portfolio, it is necessary to calculate the value of these portions. To require that the values of the portions be recalculated for subsequent overlays would be inefficient. In computer-based combined medium communications, the amount of information that a given system can convey is dependent on the efficiency of the employment of program instruction sets and combining synch commands.
52. The apparatus of claim 51, wherein said receiver station receives said plurality of signals from said transmitter, said apparatus further comprising	Column 19 lines 35-37.	Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day.	Page 449 lines 13-26.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.)

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		Column 18 lines 48-51.	Several separate news services transmit news on different channels carried on the multi-channel cable transmission to converter boxes, **222** and **201**, and to signal processor, **200**.	Page 420 lines 21-29.	Two remote stations--remote news-service-A station and remote news-service-B station--transmit, from geographically separate locations, two different broadcast print transmissions. The intermediate transmission station of Fig. 6 receives and retransmits information the transmissions of said remote stations on digital data channels A and B, respectively, that are inputted to converter boxes, 222 and 201, and to signal processor, 200.
		Column 19 lines 17-23.	... processor or monitor, **12**, which reacts, in a predetermined fashion by passing also externally to microcomputer, **205**, all signals that it passes to buffer/ comparator, **14**. Analyzing these identifier signals in a predetermined fashion, microcomputer, **205**, determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, ...
				Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
				Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, ... to input .... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on-CC13.... Said instructions contain one instance, and ... program-unit-of-interest information that is

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				preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	... to receive the transmission of cable channel 13; ...
	Column 19 lines 27-29.	...and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."	Page 445 line 24 to page 446 line 1.	... instructions causes controller, 20, to switch power on to monitor, 202M, and commence transferring the television output transmission of microcomputer, 205, to said monitor, 202M; ... Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, and to tune monitor, 202M, in a predetermined fashion.
			Page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio ...
one of a signal generator and	Column 12 lines 38-41.	... signal generators, **82**, **86**, and **90**, also well known in the art, that controller/ computer, **73**, can instruct to add signals	Page 354 lines 21-24.	... and signal generators, 82, 86, and 90, also well known in the art, that computer, 73, can cause to embed SPAM information as

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		to programing as required.		required.
	Column 9 lines 31-33.	A digital signal is embedded by conventional generating and encoding means and transmitted in a television, radio or other transmission.	Page 22 lines 1-6.	... a first series of control instructions is generated, embedded sequentially on said line or lines of the vertical interval, and transmitted on the first and each successive frame of said television program transmission, signal unit by signal unit and word by word, until said series has been transmitted in full.
			Page 14 line 35 to page 15 line 2.	Examples of signal words are a string of one or more digital data bits encoded together on a single line of video or sequentially in audio.
			Page 36 lines 2-3.	... processes signal information embedded in an inputted radio frequency.
			Page 36 lines 19-20.	... processes signal information embedded in a frequency other than a television or radio frequency.
second receiver for communicating a second of said plurality of signals.	Column 10 lines 30-39.	The facility receives programing from many sources. Transmissions may be received from satellites by satellite antenna, **50**, low noise amplifiers, **51** and **52**, and TV receivers, **53**, **54**, **55**, and **56**. Microwave transmissions can be received by microwave antenna, **57**, and television video and audio receivers, **58** and **59**. Conventional TV broadcast transmissions can be received by antenna, **60**, and TV demodulator, **61**. Other electronic programing input means, **62**, can receive programing transmissions.	Page 324 lines 23-31.	The station receives programing from many sources. Transmissions are received from a satellite by satellite antenna, 50, low noise amplifiers, 51 and 52, and TV receivers, 53, 54, 55, and 56. Microwave transmissions are received by microwave antenna, 57, and television video and audio receivers, 58 and 59. Conventional TV broadcast transmissions are received by antenna, 60, and TV demodulator, 61. Other electronic programming transmissions are received by other programming input means, 62.
	Column 10 lines 40-41.	All of these received transmissions feed into the facility by hard-wire and ...	Page 324 lines 31-33.	Each receiver/modulator/input apparatus, 53 through 62, transfers its received transmissions into the station by hard-wire ...

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53. The apparatus of claim 52, wherein said receiver station receives said plurality of signals in	Column 9 lines 53-55.	The local oscillator, being thus sequenced, will allow each signal decoder, 30 and 40, to receive a particular frequency at a particular time interval.	Page 257 line 24 to page 258 line 19.	Said detection-complete information causes controller, 20, to cause oscillator, 6, to cause the selection of the next channel in the predetermined television channel selection pattern: wireless channel 9. Automatically oscillator, 6, causes mixer, 3, to select the frequency of channel 9 and input said frequency of interest, at a fixed frequency, to decoder, 30 ... Controller, 20, has capacity for keeping track of elapsed time, and after determining in a predetermined fashion that a particular predetermined period of time has elapsed from the input of wireless channel 9 to decoder, 30, controller, 20, ... causes oscillator, 6, to cause the selection of the next channel in the predetermined television channel selection pattern: wireless channel 13.
			Page 265 line 27 to Page 266 line 21.	Said radio-detection-complete information causes ... controller, 20, to cause oscillator, 6, to cause the selection of the next frequency in the predetermined radio frequency selection pattern: 99.0 MHz. Automatically oscillator, 6, causes mixer, 2, to select said frequency and input it, at a fixed frequency, to decoder, 40 ... After determining, in a predetermined fashion, that a particular predetermined period of time has elapsed from the input of said 99.0 MHz frequency to decoder, 40, controller, 20, ... causes oscillator, 6, to cause the selection of the next frequency in the predetermined radio frequency selection pattern: 100.0 MHz.
a single information transmission, said apparatus further comprising	Column 18 lines 48-51.	Several separate news services transmit news on different channels carried on the multi-channel cable transmission to converter boxes, 222 and 201, and to signal processor, 200.	Page 420 lines 21-29.	Two remote stations--remote news-service-A station and remote news-service-B station--transmit, from geographically separate locations, two different broadcast print transmissions. The intermediate transmission station of

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				Fig. 6 receives and retransmits information the transmissions of said remote stations on digital data channels A and B, respectively, that are inputted to converter boxes, 222 and 201, and to signal processor, 200.
one of a combiner and a multiplexer for combining said first of said plurality of signals and said second of said plurality of signals.	Column 10 lines 43-47.	... and/or to equipment that outputs them over various channels to the cable system's field distribution system, 93, which equipment includes here cable channel modulators, 83, 87, and 91, and channel combining and multiplexing system, 92.	Page 325 lines 1-4.	... apparatus that outputs said transmissions over various channels to the cable system's field distribution system, 93, which apparatus includes cable channel modulators, 83, 87, and 91, and channel combining and multiplexing system, 92.
54. The apparatus of claim 51, wherein said receiver station determines said content of said second medium by processing	Column 19 lines 17-23.	... processor or monitor, 12, which reacts, in a predetermined fashion by passing also externally to microcomputer, 205, all signals that it passes to buffer/ comparator, 14. Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, ...
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, ... to input ... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on- CC13...

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			Page 439 lines 14-15.	Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20. ... to receive the transmission of cable channel 13; ...
a first identifier, said apparatus further comprising	Column 19 lines 14-15.	... pass all program and channel identifiers on all programing being cablecast on the multi-channel system.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, of the station of Fig. 7 and 7C ...
			Page 248 lines 22-26 from example #5.	Via a conventional multi- channel cable transmission, in a fashion well known in the art, four channels of conventional television programming and two conventional FM radio signals are inputted to a first alternate contact of switch, 1, and to mixer, 2.
			Page 250 lines 13-16 from example #5.	Example #5 begins with the embedding and transmitting, at the remote station that originates the "Wall Street Week" broadcast, of the first message of the "Wall Street Week" program ...
			Page 252 lines 15-35	Then, in a predetermined fashion, control

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			from example #5.	processor, 39J, determines that said first command contains subject matter meter-monitor information causing said control processor, 39J, to transmit a message that consists of … execution segment information that is addressed to microcomputer, 205, (and that causes microcomputer, 205, to process the information of the meter- monitor segment immediately following said execution segment information as new programming now being transmitted on the channel of the channel mark of said meter-monitor segment segment) then meter-monitor segment information that includes the "**program unit identification code**" and subject matter information of said first command and **the channel mark of cable channel 13** … (Said message whose transmission is caused by receiving said first command enables microcomputer, 205, in a fashion described more fully below, to tune automatically to receive the program that said "program unit identification code" identifies if said program is of interest, ….
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new-program-message (#5) and the 1st-new-radio-program- message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
a first processor for outputting said first identifier.	Column 11 lines 15-17.	Cable program controller and computer, 73, is the central automatic control unit for the transmission facility.	Page 326 lines 19-20.	Cable program controller and computer, 73, is the central automatic control unit for the transmission station.

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	Column 11 lines 38-46.	By comparing identification signals on the incoming programing with the programing schedule received earlier from local input, 74, and/or from a remote site via network, 98, controller/computer, 73, can determine when and on what channel or channels the head end facility should transmit the programing. Controller/computer, 73, has means for communicating control information with matrix switch, 75, and video recorder/players, 76 and 78.	Page 327 line 35 to page 328 line 13.	Computer, 73, monitors incoming programming by means of the aforementioned dedicated decoders of signal processor system, 71. By means of the SPAM message information, with source mark information, received from code reader, 72, computer, 73, determines what specific program unit has been received by each receiver, 53 through 62, and is passing in line, via each distribution amplifier, 63 through 70, to matrix switch, 75. By comparing selected meter-monitor information of said message information with information of the programming schedule received earlier from input, 74, and/or network, 98, computer, 73, can determine, in a predetermined fashion, when and on what channel or channels the station of Fig. 6 should transmit the programming of each received program unit.
			Page 84 lines 26-28.	SPAM signals are generated at original transmission stations or intermediate transmission stations and embedded in television or radio or other programming transmissions....
			Page 28 lines 26-27.	... monitor information that identifies what programming is available, ...
			Page 49 lines 26-27.	Meter-monitor segments contain meter information and/or monitor information.
			Page 328 lines 14-16.	Computer, 73, has means for communicating control information with matrix switch, 75, and video recorders, 76 and 78, ...
55. The apparatus of claim 54, wherein	*In general* Column 18 lines 48-55.	Several separate news services transmit news on different channels carried on the	*In general* Page 420 line 21 to	Two remote stations--remote news-service-A station and remote news-service-B

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said receiver station processes a portion of said first medium based on a second identifier, said apparatus further comprising a		multi-channel cable transmission to converter boxes, 222 and 201, and to signal processor, 200. The news services preceed each news transmission with a unique signal that uniquely identifies the company or companies to which the news item refers and/or the industries.	page 421 line 7.	station--transmit, from geographically separate locations, two different broadcast print transmissions. The intermediate transmission station of Fig. 6 receives and retransmits information the transmissions of said remote stations on digital data channels A and B, respectively, that are inputted to converter boxes, 222 and 201, and to signal processor, 200. Each remote station transmits each particular news item within the particular format of a Transmit-News-Item SPAM message, and receiving any given message in a Transmit-News-Item SPAM message … In due course, said remote news-service-A station …
	Column 19 lines 35-41.	Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.	Page 449 lines 13-35.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.) Alternatively, microcomputer, 205, is caused in a predetermined fashion (for example, by a SPAM message a given transmission monitored by signal processor, 200, in any of the above described fashions) automatically to telephone a remote data service computer, by

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				means of network, 262, in a fashion well known in the art, and to cause said remote computer to select and transmit the particular closing price datum or data of the stock or stocks of the portfolio of said microcomputer, 205, thereby causing said microcomputer, 205, to record said datum or data in a predetermined fashion.
selective transfer device operatively connected to said transmitter for communicating at least one of	Column 11 lines 50-57.	... if controller/computer, **73**, determines that programing incoming via receiver, **53**, should be transmitted immediately to the field distribution system, **93**, via cable channel modulator, **87**, controller/computer, **73**, instructs matrix switch, **75**, to configure its switches so as to transfer programing transmissions inputed from TV receiver, **53**, to the output that leads to modulator, **87**.	Page 328 line 22 to page 329 line 1.	For example, computer, 73, receives a given SPAM message that contains given "program unit identification code" information and the added source mark information of said message identifies distribution amplifier, 63. Receiving said message causes computer, 73, to determine, in a predetermined fashion, that said "code" information matches particular preprogrammed schedule information of programming that is scheduled to be retransmitted immediately upon receipt to field distribution system, 93, via cable channel modulator, 87. In its preprogrammed fashion, so determining causes computer, 73, to cause matrix switch, 75, to configure its switches so as to transfer the programming transmission inputed (via distribution amplifier, 63) to matrix switch, 75, from TV receiver, 53, to that output of matrix switch, 75, that outputs to modulator, 87.
said first identifier and	Column 19 lines 14-15.	... pass all program and channel identifiers on all programing being cablecast on the multi-channel system.	Page 435 lines 16-18. Page 248 lines 22-26 from example #5.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, of the station of Fig. 7 and 7C ... Via a conventional multi- channel cable transmission, in a fashion well known in the art, four channels of conventional television programming and two conventional FM radio signals are inputed to a first alternate contact of switch, 1, and to mixer, 2.

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			Page 250 lines 13-16 from example #5.	Example #5 begins with the embedding and transmitting, at the remote station that originates the "Wall Street Week" broadcast, of the first message of the "Wall Street Week" program ...
			Page 252 lines 15-35 from example #5.	Then, in a predetermined fashion, control processor, 39J, determines that said first command contains subject matter meter-monitor information causing said control processor, 39J, to transmit a message that consists of ... execution segment information that is addressed to microcomputer, 205, (and that causes microcomputer, 205, to process the information of the meter- monitor segment immediately following said execution segment information as new programming now being transmitted on the channel of the channel mark of said meter-monitor segment segment) then meter-monitor segment information that includes the **"program unit identification code"** and subject matter information of said first command and **the channel mark of cable channel 13** ... (Said message whose transmission is caused by receiving said first command enables microcomputer, 205, in a fashion described more fully below, to tune automatically to receive the program that said "program unit identification code" identifies if said program is of interest, ...
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new-program-message (#5) and the 1st-new-radio-program- message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions

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				described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
	Column 19 lines 17-23.	... processor or monitor, 12, which reacts, in a predetermined fashion by passing also externally to microcomputer, 205, all signals that it passes to buffer/ comparator, 14. Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, ...
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, ... to input ... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on-CC13... Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said

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				program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	... to receive the transmission of cable channel 13; ...
said second identifier to said transmitter.	Column 19 lines 35-41.	Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.	Page 449 lines 13-35.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.) Alternatively, microcomputer, 205, is caused in a predetermined fashion (for example, by a SPAM message a given transmission monitored by signal processor, 200, in any of the above described fashions) automatically to telephone a remote data service computer, by means of network, 262, in a fashion well known in the art, and to cause said remote computer to select and transmit the particular closing price datum or data of the stock or stocks of the portfolio of said microcomputer,

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	Column 18 lines 48-55.	Several separate news services transmit news on different channels carried on the multi-channel cable transmission to converter boxes, **222** and **201**, and to signal processor, **200**. The news services preceed each news transmission with a unique signal that uniquely identifies the company or companies to which the news item refers and/or the industries.	Page 420 line 21 to page 421 line 7.	205, thereby causing said microcomputer, 205, to record said datum or data in a predetermined fashion.
				
				Two remote stations--remote news-service-A station and remote news-service-B station--transmit, from geographically separate locations, two different broadcast print transmissions.
				    The intermediate transmission station of Fig. 6 receives and retransmits information the transmissions of said remote stations on digital data channels A and B, respectively, that are inputted to converter boxes, 222 and 201, and to signal processor, 200.
				    Each remote station transmits each particular news item within the particular format of a Transmit-News-Item SPAM message, and receiving any given message in a Transmit-News-Item SPAM message ...
				    In due course, said remote news-service-A station ...

56. The apparatus of claim 55, wherein said selective transfer device communicates	Column 11 lines 54-57.	... controller/computer, **73**, instructs matrix switch, **75**, to configure its switches so as to transfer programing transmissions inputted from TV receiver, **53**, to the output that leads to modulator, **87**.	Page 328 line 31 to page 329 line 1.	In its preprogrammed fashion, so determining causes computer, 73, to cause matrix switch, 75, to configure its switches so as to transfer the programming transmission inputted (via distribution amplifier, 63) to matrix switch, 75, from TV receiver, 53, to that output of matrix switch, 75, that outputs to modulator, 87.
said first identifier and said	Column 4 lines 5-6.	These techniques employ signals embedded in programs.	Page 13 lines 25-26.	The present invention employs signals embedded in programming.
	Column 19 lines 17-23.	... processor or monitor, **12**, which reacts, in a predetermined fashion by passing also externally to microcomputer, **205**, all signals that it passes to buffer/ comparator,	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, ...

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			14. Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
				Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, ... to input .... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on-CC13...
					Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance.
					Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.

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			Page 439 lines 14-15.	... to receive the transmission of cable channel 13; ...
second identifier, said apparatus further comprising	Column 19 lines 35-41.	Each weekday, microcomputer, **205**, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.	Page 449 lines 13-35.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.) Alternatively, microcomputer, 205, is caused in a predetermined fashion (for example, by a SPAM message a given transmission monitored by signal processor, 200, in any of the above described fashions) automatically to telephone a remote data service computer, by means of network, 262, in a fashion well known in the art, and to cause said remote computer to select and transmit the particular closing price datum or data of the stock or stocks of the portfolio of said microcomputer, 205, thereby causing said microcomputer, 205, to record said datum or data in a predetermined fashion.
a controller operatively connected to said selective transfer device for	Column 11 lines 44-46.	Controller/computer, 73, has means for communicating control information with matrix switch, 75, and video recorder/players, 76 and 78.	Page 328 lines 14-16.	Computer, 73, has means for communicating control information with matrix switch, 75, and video recorders, 76 and 78,.....

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controlling said selective transfer device to communicate	Column 11 lines 54-57.	... controller/computer, 73, instructs matrix switch, 75, to configure its switches so as to transfer programing transmissions inputed from TV receiver, 53, to the output that leads to modulator, 87.	Page 328 line 31 to page 329 line 1.	In its preprogrammed fashion, so determining causes computer, 73, to cause matrix switch, 75, to configure its switches so as to transfer the programming transmission inputed (via distribution amplifier, 63) to matrix switch, 75, from TV receiver, 53, to that output of matrix switch, 75, that outputs to modulator, 87.
said first identifier and	Column 4 lines 5-6.	These techniques employ signals embedded in programs.	Page 13 lines 25-26.	The present invention employs signals embedded in programming.
	Column 19 lines 17-23.	... processor or monitor, 12, which reacts, in a predetermined fashion by passing also externally to microcomputer, 205, all signals that it passes to buffer/ comparator, 14. Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, ...
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, ... to input .... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputed is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on-CC13... Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205,

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				contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	... to receive the transmission of cable channel 13; ...
said second identifier	Column 19 lines 35-41.	Each weekday, microcomputer, **205**, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.	Page 449 lines 13-35.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.) Alternatively, microcomputer, 205, is caused in a predetermined fashion (for example, by a SPAM message a given transmission monitored by signal processor, 200, in any of

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		the above described fashions) automatically to telephone a remote data service computer, by means of network, 262, in a fashion well known in the art, and to cause said remote computer to select and transmit the particular closing price datum or data of the stock or stocks of the portfolio of said microcomputer, 205, thereby causing said microcomputer, 205, to record said datum or data in a predetermined fashion.		
at different times.	Column 19 lines 35-37.	Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day.	Page 449 lines 13-26.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.)
	Column 19 lines 20-23.	Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new-program-message (#5) and the 1st-new-radio-program- message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired

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				programming.)
			Page 435 lines 16-25.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, of the station of Fig. 7 and 7C detects one instance of the Select-WSW-Program-Unit SPAM message of the station of Fig. 6 … Receiving said Select-WSW-Program-Unit message causes the apparatus of said signal processor, 200, to input said message to the microcomputer, 205, of said station.
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program-Unit message causes decoder, 203, … to input … the information segment of said message to the CPU of microcomputer, 205, and to cause said CPU to execute the information so inputted as a machine language job. The information so inputted is the aforementioned determine-whether-to-select instructions that contain said particular specific-WSW information and said please-fully-enable-WSW-on-CC13-at-particular-8:30 information. Executing said determine-whether-to-select instructions causes microcomputer, 205, to… Said instructions contain one instance, and … program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer,

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				205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	...to receive the transmission of cable channel 13;...
	Column 19 lines 45-46.	When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, ...	Page 451 lines 6-7.	When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, ...
57. A method of enabling a	Column 19 lines 60-66.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205. This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, ...	Page 25 line 33 to page 26 line 2..	Then the host says, "And here is what your portfolio did." At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205; and executed ...
			Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed to process said information automatically. Controller, 39, is preprogrammed to ... correct errors in retained received information by means of forward error correction techniques well known in the art; to convert, as may be required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; ... to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus.

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			Page 26 lines 4-8.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M.
network to	Column 15 lines 57-62.	The signals for which the decoders are monitoring are likely to be unique digital codes that may identify each programing or data unit received and the source of each. They may identify networks, broadcast stations, channels on cable systems, and possibly times of transmission.	Page 315 lines 20-24.	Each one of said decoders is preprogrammed to detect and transfer to said onboard controller, 14, via said bus means, the meter-monitor information of every unencrypted SPAM message in the transmission to which its associated apparatus is tuned.
			Page 44 lines 26-32.	Commands often contain meter-monitor segments. Said segments contain meter information and/or monitor information, and the information of said segments causes subscriber station signal processor systems to assemble, record, and transmit meter records to remote billing stations and monitor records to remote ratings stations in fashions that are described more fully below.
			Page 49 line 26 to Page 50 line 4.	Meter-monitor segments contain meter information and/or monitor information. Examples of categories of such information include: … unique codes for programming; … and unique codes that identify the sources and suppliers of computer data. … origins of transmissions (eg., network source stations, broadcast stations, cable head end stations); dates and times ….
			Page 28 lines 26-27.	… **monitor information that identifies** what **programming** is available, ….

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output a multimedia presentation, said network including	Column 19 line 64 to column 20 line 2.	This signal instructs microcomputer, **205**, to transmit the first overlay to TV set, **202**, for as long as it receives the same instruction signal from processor, **204**. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 26 lines 4-11.	..."GRAPHICS ON". Said signal instructs microcomputer, **205**, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
			Page 451 line 3.	And the Fig. 1C combining is displayed.
	Column 19 lines 31-34.	FIG **6C** can also illustrate how programing delivered at different times to one place can be co-ordinated to give a multimedia presentation at one time in one place.	Page 18 lines 24-27.	Fig. 7C is a block diagram of signal processing apparatus and methods selecting receivable information and programming and controlling combined medium, multi-channel presentations.
			page 450 line 27 to page 451 line 11.	(To accomplish all this has required only that the subscriber of microcomputer, 205, [and other subscribers at other stations] cause the installation and connection of the apparatus shown in the figures of this submission, especially Fig. 7 (and 7C); caused his microcomputer, 205, to be preprogrammed as described above; and preinformed microcomputer, 205, of his wish to view said "Wall Street Week" program by causing the aforementioned select-WSW information to be recorded at said microcomputer, 205.) Then the combined medium combining process described above in "One Combined Medium" and in examples #1, #2, #3, #4, etc. commences. And the Fig. 1C combining is displayed. But the combining of Fig. 1C is just part of a larger process. When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, the

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				program instruction set in the first message of the "Wall Street Week" example instructs microcomputer, 205, to generate not one but a plurality overlays. The combining of Fig. 1C is merely the first.
a transmitter station and	Column 10 lines 15-20.	The signal processing apparatus outlined in FIGS. 1, A, 2B, and 2C, and their variants as appropriate, can be used to automate the operations of an intermediate transmission point whether it be a broadcast station transmitting only a single channel of programing or a cable system cablecasting many channels.	Page 324 lines 8-17.	The signal processing apparatus outlined in Figs. 2, 2A, 2B, 2C, and 2D, and their variants as appropriate, can be used to automate the operations of intermediate transmission stations that receive and retransmit programming. The stations so automated may transmit any form of electronically transmitted programming, including television, radio, print, data, and combined medium programming and may range in scale of operation from wireless broadcast stations that transmit a single programming transmission to cable systems that cablecast many channels simultaneously.
a receiver station, said receiver station adapted to	Column 10 lines 40-47.	All of these received transmissions feed into the facility by hard-wire and connect, by means of conventional switches (here matrix switch, 75), to one or more video recorder/players, 76 and 78, and/or to equipment that outputs them over various channels to the cable system's field distribution system, 93, which equipment includes here cable channel modulators, 83, 87, and 91, and channel combining and multiplexing system, 92.	Page 324 line 31 to page 325 line 4.	Each receiver/modulator/input apparatus, 53 through 62, transfers its received transmissions into the station by hard-wire, a conventional matrix switch, 75, well known in the art, one or more recorder/players, 76 and 78, apparatus that outputs said transmissions over various channels to the cable system's field distribution system, 93, which apparatus includes cable channel modulators, 83, 87, and 91, and channel combining and multiplexing system, 92.
receive a plurality of	Column 9 lines 53-55.	The local oscillator, being thus sequenced, will allow each signal decoder, 30 and 40, to receive a particular frequency at a particular time interval.	Page 257 line 24 to page 258 line 19.	Said detection-complete information causes controller, 20, to cause oscillator, 6, to cause the selection of the next channel in the predetermined television channel selection pattern: wireless channel 9. Automatically oscillator, 6, causes mixer, 3, to select the frequency of channel 9 and input said frequency of interest, at a fixed frequency, to

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				decoder, 30 … Controller, 20, has capacity for keeping track of elapsed time, and after determining in a predetermined fashion that a particular predetermined period of time has elapsed from the input of wireless channel 9 to decoder, 30, controller, 20, … causes oscillator, 6, to cause the selection of the next channel in the predetermined television channel selection pattern: wireless channel 13.
			Page 265 line 27 to Page 266 line 21.	Said radio-detection-complete information causes … controller, 20, to cause oscillator, 6, to cause the selection of the next frequency in the predetermined radio frequency selection pattern: 99.0 MHz. Automatically oscillator, 6, causes mixer, 2, to select said frequency and input it, at a fixed frequency, to decoder, 40 … After determining, in a predetermined fashion, that a particular predetermined period of time has elapsed from the input of said 99.0 MHz frequency to decoder, 40, controller, 20, … causes oscillator, 6, to cause the selection of the next frequency in the predetermined radio frequency selection pattern: 100.0 MHz.
	Column 19 lines 35-37.	Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day.	Page 449 lines 13-26.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which

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				remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.)
media	Column 1 lines 6-8.	At the present time, vast amounts of programing are transmitted through various media throughout the United States....	Page 1 lines 27-28.	But television, radio, and broadcast print are only mass media.
	In general, Column 3 lines 48-56.	Another method has application at receiver sites such as private homes or public places like theaters, hotels, brokerage offices, etc., whether commercial establishments or not. This method provides techniques whereby, automatically, single channel, single medium presentations, be they television, radio, or other electronic transmissions, may be recorded, co-ordinated in time with other programing previously transmitted and recorded, or processed in other fashions.	In general, Page 86 lines 12-14.	(Hereinafter, the preferred normal location for transmitting signals in any given communication medium is called, the "normal transmission location".)
	For example, see "One Digital Data Ch."	[See Fig. 6C.]	For example, see "One Digital Data Channel,"	[See Fig. 7C]
			or, Page 85 lines 33-35.	In broadcast print or data communications, the preferred normal transmission location for SPAM signals is in the same location as the conventional information.
from different sources,	Column 19 lines 27-29.	...and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."	Page 445 line 24 to page 446 line 1.	... instructions causes controller, 20, to switch power on to monitor, 202M, and commence transferring the television output transmission of microcomputer, 205, to said monitor, 202M; ... Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, and to tune monitor, 202M, in a predetermined fashion.
			Page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said

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	Column 19 lines 35-37.	Each weekday, microcomputer, **205**, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day.	Page 449 lines 13-26.	information, and to emit sound in accordance with said audio …

Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.) |
process at least two of said plurality of media	Column 19 lines 17-20.	… processor or monitor, **12**, which reacts, in a predetermined fashion by passing also externally to microcomputer, **205**, all signals that it passes to buffer/ comparator, **14**.	Page 288 lines 16-20.	… microcomputer, 205, may also automatically substitute for local control, 225, in predetermined fashions in inputting control information to said controller, 20, on the basis of preprogrammed instructions and information previously inputted to said microcomputer, 205.
			Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, …
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st-and 3rd-new- program-message (#5) and the 1st-new- radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station

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				receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 435 lines 16-25 from example #5.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, of the station of Fig. 7 and 7C detects one instance of the Select-WSW-Program-Unit SPAM message of the station of Fig. 6 … Receiving said Select-WSW-Program-Unit message causes the apparatus of said signal processor, 200, to input said message to the microcomputer, 205, of said station.
	Column 19 lines 35-41.	Each weekday, microcomputer, **205**, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.	Page 449 lines 13-35.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.) Alternatively, microcomputer, 205, is caused in a predetermined fashion (for example, by a SPAM message a given transmission monitored by signal processor, 200, in any of the above described fashions) automatically to telephone a remote data service computer, by

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					means of network, 262, in a fashion well known in the art, and to cause said remote computer to select and transmit the particular closing price datum or data of the stock or stocks of the portfolio of said microcomputer, 205, thereby causing said microcomputer, 205, to record said datum or data in a predetermined fashion.
in order to output said multimedia presentation,		Column 19 lines 20-29.	Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 436 line 9 to page 437 line 6.	Receiving said Select-WSW-Program-Unit message causes decoder, 203, … to input … the information segment of said message to the CPU of microcomputer, 205, … The information so inputted is the aforementioned determine-whether-to-select instructions that contain said particular specific-WSW information and said … enable-WSW-on-CC13 … Said instructions contain one instance, and … program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20. Receiving said please-fully-enable-WSW-on-CC13-at- particular-8:30 information causes controller, 20, in a predetermined fashion, to prepare particular apparatus …
			Then, in a predetermined fashion, microcomputer, 205, may		

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				...to cause selected apparatus of said station--cable converter box, 201, ... to receive the transmission of cable channel 13;	Page 439 lines 9-15.
		instruct tuner, 214, to switch box, 201, to channel X	Page 295 lines 6-8.	... Then, automatically, controller, 20, causes a selected tuner, 214, to tune to the frequency of cable channel 13, thereby causing its associated converter box, 201, to convert its	
		and may instruct control system, 220, to turn video recorder, 217, on and record "Wall Street Week,"	Page 445 lines 24-27.	...instructions causes controller, 20, ...; to switch power on to video recorder/player, 217,	
			Page 446 lines 18-23.	...controller, 20, ... causes recorder/player, 217, to record said information of the "Wall Street Week" program.	
		and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on	Page 445 line 24 to page 446 line 1.	...instructions causes controller, 20, to switch power on to monitor, 202M, ... Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, ...	
		and tuner, 215, to tune appropriately to "Wall Street Week."	Page 445 line 35 to page 446 line 1.	...and to tune monitor, 202M, in a predetermined fashion.	
			Page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said program, to emit sound in accordance with said audio	
Column 19 lines 60 to page 20 line 2.		At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203,		At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer,	Page 25 line 34 to page 26 line 2.

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		and transferred via processor, **204**, to microcomputer, **205**. This signal instructs microcomputer, **205**, to transmit the first overlay to TV set, **202**, for as long as it receives the same instruction signal from processor, **204**. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 37 line 26 to page 38 line 8.	205; ... In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed ... to correct errors ... by means of forward error correction techniques well known in the art, as may be required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; ... to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus
			Page 26 lines 4-11.	... Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
			Page 451 line 3.	And the Fig. 1C combining is displayed.
identify content of a first and	Column 19 lines 20-23.	Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new-program-message (#5) and the 1st-new-radio-program- message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions

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				described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 435 lines 16-25.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, of the station of Fig. 7 and 7C detects one instance of the Select-WSW-Program-Unit SPAM message of the station of Fig. 6 … Receiving said Select-WSW-Program-Unit message causes the apparatus of said signal processor, 200, to input said message to the microcomputer, 205, of said station.
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program-Unit message causes decoder, 203, … to input …. the information segment of said message to the CPU of microcomputer, 205, and to cause said CPU to execute the information so inputted as a machine language job. The information so inputted is the aforementioned determine-whether-to-select instructions that contain said particular specific-WSW information and said please-fully-enable-WSW-on-CC13-at-particular-8:30 information. Executing said determine-whether-to-select instructions causes microcomputer, 205, to…. Said instructions contain one instance, and … program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and

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			Page 439 lines 14-15.	**determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20. ...to receive the transmission of cable channel 13;...
content of a second of said at least two of said plurality of media	Column 18 lines 52-55.	The news services preceed each news transmission with a unique signal that uniquely identifies the company or companies to which the news item refers and/or the industries.	Page 420 line 32 to page 421 line 17.	Each remote station transmits each particular news item within the particular format of a Transmit-News-Item SPAM message, and receiving any given message in a Transmit-News-Item SPAM message .... In due course, said remote news-service-A station transmits a particular AT&T news item in a particular Transmit-AT&T-News-Item message that is in said Transmit- News-Item SPAM message format and that consists of ... the "program unit identification code" information of said AT&T news item and subject matter information of said binary information of "T", appropriate padding bits, an information segment that contains **said AT&T news item,** and an end of file signal.
	Column 12 lines 57-64.	This particular embodiment describes a transmission facility transmitting only television programing. The facility could also process and transmit radio programing and other electronic data programing according to the methods described here by adding radio decoder paths and other signal decoder paths, as shown in FIGS **2B** and **2C** respectively, to signal processors, **71** and **96**, and decoders, **77**, **79**, **80**, **84**, and **88**.	Page 339 lines 9-26.	So far this disclosure has described an intermediate transmission station that transmits conventional television programming; however, the intermediate station automating concepts of the present invention apply to all forms of electronically transmitted programming. The station of Fig. 6 can process and transmit radio programming in the fashions of the above television programming by adding radio transmission and audio recorder/player means, each with associated radio decoder means as shown in Fig. 2B, wherever television means are shown

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				in Fig. 6, all with similar control means to that shown in Fig. 6 and by processing radio programming with appropriately embedded signals according to the same processing and transmitting methods described above. Likewise, said station can transmit broadcast print and data communications programming by adding appropriate transmission and recorder/player means and decoder/detector means with control means and using the same processing and transmitting methods.
	Column 19 lines 39-41.	[Microcomputer, 205,] records those prices that **relate** to the stocks in its stored portfolio.	Page 449 lines 13-20.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer.
based on processing said at least two of said plurality of media and	Column 19 lines 17-23.	... processor or monitor, **12**, which reacts, in a predetermined fashion by passing also externally to microcomputer, **205**, all signals that it passes to buffer/ comparator, **14**. Analyzing these identifier signals in a predetermined fashion, microcomputer, **205**, determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, ...
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 436 line 9 to	Receiving said Select-WSW-Program- Unit

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			page 437 line 3.	message causes decoder, 203, … to input … the information segment of said message to the CPU of microcomputer, 205, … The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said … enable-WSW-on-CC13… Said instructions contain one instance, and … program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	… to receive the transmission of cable channel 13; …
	Column 19 lines 35-41.	Each weekday, microcomputer, **205**, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.	Page 449 lines 13-35.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing

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				stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.) Alternatively, microcomputer, 205, is caused in a predetermined fashion (for example, by a SPAM message a given transmission monitored by signal processor, 200, in any of the above described fashions) automatically to telephone a remote data service computer, by means of network, 262, in a fashion well known in the art, and to cause said remote computer to select and transmit the particular closing price datum or data of the stock or stocks of the portfolio of said microcomputer, 205, thereby causing said microcomputer, 205, to record said datum or data in a predetermined fashion.
output said multimedia presentation based on identifying said content of said first and said content of said second of said at least two of said plurality of media,	Column 19 lines 20-29.	Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 436 line 9 to page 437 line 6.	Receiving said Select-WSW-Program-Unit message causes decoder, 203, … to input … the information segment of said message to the CPU of microcomputer, 205, … The information so inputted is the aforementioned determine-whether-to-select instructions that contain said particular specific-WSW information and said … enable-WSW-on-CC13 …. Said instructions contain one instance, and … program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said

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		Then, in a predetermined fashion, microcomputer, **205**, may		program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20. Receiving said please-fully-enable-WSW- on-CC13-at- particular-8:30 information causes controller, 20, in a predetermined fashion, to prepare particular apparatus …
	Page 439 lines 9-15.			…to cause selected apparatus of said station--cable converter box, 201, … to receive the transmission of cable channel 13; …
	Page 295 lines 6-8.	instruct tuner, **214**, to switch box, **201**, to channel X		Then, automatically, controller, 20, causes a selected tuner, 214, to tune to the frequency of cable channel 13, thereby causing its associated converter box, 201, to convert its
	Page 445 lines 24-27.	and may instruct control system, **220**, to turn video recorder, **217**, on and record "Wall Street Week,"		…
	Page 446 lines 18-23.			…instructions causes controller, 20, …; to switch power on to video recorder/player, 217, …
	Page 445 line 24 to page 446 line 1.	and also microcomputer, **205**, may instruct switch, **216**, to turn TV set, **202**, on		…controller, 20, … causes recorder/player, 217, to record said information of the "Wall Street Week" program.
	Page 445 line 35 to page 446 line 1.	and tuner, **215**, to tune appropriately to "Wall Street Week."		…instructions causes controller, 20, to switch power on to monitor, 202M, …. Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, ….
	Page 446 lines 17-21.			…and to tune monitor, 202M, in a predetermined fashion.

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	Column 19 lines 60 to page 20 line 2.			In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio ...
		At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205. This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 25 line 34 to page 26 line 2.	At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205; ...
			Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed ... to correct errors ... by means of forward error correction techniques well known in the art; to convert, as may be required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; ... to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus
			Page 26 lines 4-11.	Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the

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said transmitter station	Column 10 lines 24-28.	FIGS. 3A, 3B and 3C illustrates one instance of such use. FIGS. 3A, 3B, and 3C illustrate the use of Signal Processing Apparatus and Methods at a cable television system "head end" transmission facility that cablecasts several channels of television programing.	Page 451 line 3. Page 324 lines 18-21.	subscriber's own portfolio performance overlaid on the studio generated graphic. And the Fig. 1C combining is displayed. Fig. 6 illustrates Signal Processing Apparatus and Methods at an intermediate transmission station that is a cable television system "head end" and that cablecasts several channels of television programming.
adapted to transmit at least one of said at least two of said plurality of media	Column 11 lines 50-57.	... if controller/computer, **73**, determines that programing incoming via receiver, **53**, should be transmitted immediately to the field distribution system, **93**, via cable channel modulator, **87**, controller/computer, **73**, instructs matrix switch, **75**, to configure its switches so as to transfer programing transmissions inputted from TV receiver, **53**, to the output that leads to modulator, **87**.	Page 328 line 22 to page 329 line 1.	For example, computer, 73, receives a given SPAM message that contains given "program unit identification code" information and the added source mark information of said message identifies distribution amplifier, 63. Receiving said message causes computer, 73, to determine, in a predetermined fashion, that said "code" information matches particular preprogrammed schedule information of programming that is scheduled to be retransmitted immediately upon receipt to field distribution system, 93, via cable channel modulator, 87. In its preprogrammed fashion, so determining causes computer, 73, to cause matrix switch, 75, to configure its switches so as to transfer the programming transmission inputted (via distribution amplifier, 63) to matrix switch, 75, from TV receiver, 53, to that output of matrix switch, 75, that outputs to modulator, 87.
	Column 12 lines 45-47.	Beyond channel combining system and multiplexer, **92**, amplifier, **94**, transmits programing to signal processor, **71**, and signal processor, **96**, ...	Page 337 lines 1-8.	Fig. 6 shows particular signal processor system monitoring apparatus associated with the intermediate station of Fig. 6. In field distribution system, 93, amplifier, 94, inputs programing transmissions to signal processor system, 71, (where said transmissions are inputted to one alternate

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based on an instruction, said method comprising the steps of:	Column 11 lines 3-5.	Signal processor, 71, has means, described above, to identify and separate the instruction and information signals from their associated programing and ...	Page 325 line 34 to page 326 line 7.	At signal processor system, 71, which is a system as shown in Fig. 2D, the outputted transmission of each distribution amplifier, 63, 64, 65, 66, 67, 68, 69, or 70, is inputted into a dedicated decoder (such as decoders, 27, 28, and 29 in Fig. 2D) that processes continuously the inputted transmission of said distribution amplifier, 63, 64, 65, 66, 67, 68, 69, or 70; selects SPAM messages in said transmission that are addresses to ITS apparatus of said intermediate transmission station;....
			Page 59 lines 29-33	A SPAM message is the modality whereby the original transmission station that originates said message controls specific addressed apparatus at subscriber stations. The information of any given SPAM transmission consists of a series or stream of sequentially transmitted SPAM messages.
	Column 11 lines 38-43.	By comparing identification signals on the incoming programing with the programing schedule received earlier from local input, 74, and/or from a remote site via network, 98, controller/computer, 73, can determine when and on what channel or channels the head end facility should transmit the programing.	Page 327 line 35 to page 328 line 13.	Computer, 73, monitors incoming programming by means of the aforementioned dedicated decoders of signal processor system, 71. By means of the SPAM message information, with source mark information, received from code reader, 72, computer, 73, determines what specific program unit has been received by each receiver, 53 through 62, and is passing in line, via each distribution amplifier, 63 through 70, to matrix switch, 75. By comparing selected meter-monitor information of said message information with information of the programming schedule received earlier from input, 74, and/or network, 98, computer, 73, can determine, in a

contact of the switch, 1, of the signal processor of said system, 71), and amplifier, 95, inputs programming transmissions to signal processor, 96, ...

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					predetermined fashion, when and on what channel or channels the station of Fig. 6 should transmit the programming of each received program unit.
				Page 84 lines 26-28.	SPAM signals are generated at original transmission stations or intermediate transmission stations and embedded in television or radio or other programming transmissions.…
				Page 28 lines 26-27.	… monitor information that identifies what programming is available, …
				Page 49 lines 26-27.	Meter-monitor segments contain meter information and/or monitor information.
receiving at said transmitter station in said network said at least one of said at least two of said plurality of media		Column 10 lines 30-39.	The facility receives programing from many sources. Transmissions may be received from satellites by satellite antenna, **50**, low noise amplifiers, **51** and **52**, and TV receivers, **53**, **54**, **55**, and **56**. Microwave transmissions can be received by microwave antenna, **57**, and television video and audio receivers, **58** and **59**. Conventional TV broadcast transmissions can be received by antenna, **60**, and TV demodulator, **61**. Other electronic programing input means, **62**, can receive programing transmissions.	Page 324 lines 23-31.	The station receives programming from many sources. Transmissions are received from a satellite by satellite antenna, 50, low noise amplifiers, 51 and 52, and TV receivers, 53, 54, 55, and 56. Microwave transmissions are received by microwave antenna, 57, and television video and audio receivers, 58 and 59. Conventional TV broadcast transmissions are received by antenna, 60, and TV demodulator, 61. Other electronic programming transmissions are received by other programming input means, 62.
and said instruction; and		Column 11 lines 3-5.	Signal processor, 71, has means, described above, to identify and separate the instruction and information signals from their associated programing and …	Page 325 line 34 to page 326 line 7.	At signal processor system, 71, which is a system as shown in Fig. 2D, the outputted transmission of each distribution amplifier, 63, 64, 65, 66, 67, 68, 69, or 70, is inputted into a dedicated decoder (such as decoders, 27, 28, and 29 in Fig. 2D) that processes continuously the inputted transmission of said distribution amplifier, 63, 64, 65, 66, 67, 68, 69, or 70; selects SPAM messages in said transmission that are addresses to ITS

Claim Language of Instant Application	Applicants' Priority U.S. Pat. No. '490		Instant Specification	
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				apparatus of said intermediate transmission station;....
			Page 59 lines 29-33	A SPAM message is the modality whereby the original transmission station that originates said message controls specific addressed apparatus at subscriber stations. The information of any given SPAM transmission consists of a series or stream of sequentially transmitted SPAM messages.
	Column 11 lines 38-39.	By comparing identification signals on the incoming programing ...	Page 327 line 35 to page 328 line 13.	Computer, 73, monitors incoming programming by means of the aforementioned dedicated decoders of signal processor system, 71. By means of the SPAM message information, with source mark information, received from code reader, 72, computer, 73, determines what specific program unit has been received by each receiver, 53 through 62, and is passing in line, via each distribution amplifier, 63 through 70, to matrix switch, 75. By comparing selected **meter-monitor information of said message information** with information of the programming schedule received earlier from input, 74, and/or network, 98, computer, 73, can determine, in a predetermined fashion, when and on what channel or channels the station of Fig. 6 should transmit the programming of each received program unit.
			Page 84 lines 26-28.	SPAM signals are generated at original transmission stations or intermediate transmission stations and **embedded in** television or radio or other **programming transmissions** ...
			Page 28 lines 26-27.	... **monitor information that identifies** what **programming** is available, ...
			Page 49 lines 26-27.	Meter-monitor segments contain meter

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transmitting said at least one of said at least two of said plurality of media to said receiver station				information and/or monitor information.
	Column 12 lines 45-47.	Beyond channel combining system and multiplexer, **92,** amplifier, **94,** transmits programing to signal processor, **71,** and signal processor, **96,** …	Page 337 lines 1-8.	Fig. 6 shows particular signal processor system monitoring apparatus associated with the intermediate station of Fig. 6. In field distribution system, 93, amplifier, 94, inputs programming transmissions to signal processor system, 71, (where said transmissions are inputed to one alternate contact of the switch, 1, of the signal processor of said system, 71), and amplifier, 95, inputs programming transmissions to signal processor, 96, …
	Column 19 lines 17-23.	… processor or monitor, **12,** which reacts, in a predetermined fashion by passing also externally to microcomputer, **205,** all signals that it passes to buffer/ comparator, **14.** Analyzing these identifier signals in a predetermined fashion, microcomputer, **205,** determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, …
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, … to input … the information segment of said message to the CPU of microcomputer, 205, … The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said … enable-WSW-on-CC13.… Said instructions contain one instance, and

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				... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance.
				Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	... to receive the transmission of cable channel 13; ...
in response to said instruction,	Column 11 lines 38-43.	By comparing identification signals on the incoming programing schedule received earlier from local input, **74,** and/or from a remote site via network, **98,** controller/computer, **73,** can determine when and on what channel or channels the head end facility should transmit the programing.	Page 327 line 35 to page 328 line 13.	Computer, 73, monitors incoming programming by means of the aforementioned dedicated decoders of signal processor system, 71. By means of the SPAM message information, with source mark information, received from code reader, 72, computer, 73, determines what specific program unit has been received by each receiver, 53 through 62, and is passing in line, via each distribution amplifier, 63 through 70, to matrix switch, 75. By comparing selected meter-monitor information of said message information with information of the programming schedule received earlier from input, 74, and/or network, 98, computer, 73, can determine, in a predetermined fashion, when and on what channel or channels the station of Fig. 6 should transmit the programming of each received program unit.

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			Page 84 lines 26-28.	SPAM signals are generated at original transmission stations or intermediate transmission stations and embedded in television or radio or other programming transmissions....
			Page 28 lines 26-27.	... monitor information that identifies what programming is available,...
			Page 49 lines 26-27.	Meter-monitor segments contain meter information and/or monitor information.
	Column 11 lines 50-57.	... if controller/computer, **73**, determines that programing incoming via receiver, **53**, should be transmitted immediately to the field distribution system, **93**, via cable channel modulator, **87**, controller/computer, **75**, instructs matrix switch, **75**, to configure its switches so as to transfer programing transmissions inputted from TV receiver, **53**, to the output that leads to modulator, **87**.	Page 328 line 22 to page 329 line 1.	For example, computer, 73, receives a given SPAM message that contains given "program unit identification code" information and the added source mark information of said message identifies distribution amplifier, 63. Receiving said message causes computer, 73, to determine, in a predetermined fashion, that said "code" information matches particular preprogrammed schedule information of programming that is scheduled to be retransmitted immediately upon receipt to field distribution system, 93, via cable channel modulator, 87. In its preprogrammed fashion, so determining causes computer, 73, to cause matrix switch, 75, to configure its switches so as to transfer the programming transmission inputted (via distribution amplifier, 63) to matrix switch, 75, from TV receiver, 53, to that output of matrix switch, 75, that outputs to modulator, 87.
whereby said network is enabled to output said multimedia presentation.	Column 19 lines 20-29.	Analyzing these identifier signals in a predetermined fashion, microcomputer, **205**, determines that "Wall Street Week" is being televised on channel X.	Page 436 line 9 to page 437 line 6.	Receiving said Select-WSW-Program-Unit message causes decoder, 203, ... to input ... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputted is the aforementioned determine-whether-to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on-

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				CC13 … Said instructions contain one instance, and … program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance.
		Then, in a predetermined fashion, microcomputer, **205**, may	Page 439 lines 9-15.	Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20. Receiving said please-fully-enable-WSW-on-CC13-at- particular-8:30 information causes controller, 20, in a predetermined fashion, to prepare particular apparatus …
		instruct tuner, **214**, to switch box, **201**, to channel X	Page 439 lines 9-15.	…to cause selected apparatus of said station--cable converter box, 201, … to receive the transmission of cable channel 13; …
			Page 295 lines 6-8.	Then, automatically, controller, 20, causes a selected tuner, 214, to tune to the frequency of cable channel 13, thereby causing its associated converter box, 201, to convert its
		and may instruct control system, **220**, to turn video recorder, **217**, on and record "Wall Street Week,"	Page 445 lines 24-27.	…
			Page 446 lines 18-23.	…instructions causes controller, 20, …; to switch power on to video recorder/player, 217, …
				…controller, 20, … causes recorder/player, 217, to record said information of the "Wall

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		and also microcomputer, **205**, may instruct switch, **216**, to turn TV set, **202**, on	Page 445 line 24 to page 446 line 1.	Street Week" program. ..instructions causes controller, 20, to switch power on to monitor, 202M, ... Automatically, controller, 20, inputs a particular instruction to decoder, 145, via said communications link, that causes decoder, 145, to switch power on to monitor, 202M, ...
		and tuner, **215**, to tune appropriately to "Wall Street Week."	Page 445 line 35 to page 446 line 1.	..and to tune monitor, 202M, in a predetermined fashion.
			Page 446 lines 17-21.	In so doing, controller, 20, causes monitor, 202M, to receive the decrypted video and audio information of the "Wall Street Week" program, to display the video image of said information, and to emit sound in accordance with said audio ....
	Column 19 lines 60 to page 20 line 2.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, **203**, and transferred via processor, **204**, to microcomputer, **205**. This signal instructs microcomputer, **205**, to transmit the first overlay to TV set, **202**, for as long as it receives the same instruction signal from processor, **204**. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 25 line 34 to page 26 line 2.	At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205; ...
			Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed ... to correct errors ... by means of forward error correction techniques well known in the art, as may be required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; ... to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred;

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			Page 26 lines 4-11.	and to transfer said signals to said apparatus ... Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
			Page 451 line 3.	And the Fig. 1C combining is displayed.
58. The method of claim 57, wherein said receiver station identifies said content of said first of said at least two of said plurality of media by processing a first identifier and	*In general* Column 18 lines 48-55.	Several separate news services transmit news on different channels carried on the multi-channel cable transmission to converter boxes, 222 and 201, and to signal processor, 200. The news services preceed each news transmission with a unique signal that uniquely identifies the company or companies to which the news item refers and/or the industries.	*In general* Page 420 line 21 to page 421 line 7.	Two remote stations--remote news-service-A station and remote news-service-B station--transmit, from geographically separate locations, two different broadcast print transmissions. The intermediate transmission station of Fig. 6 receives and retransmits information the transmissions of said remote stations on digital data channels A and B, respectively, that are inputted to converter boxes, 222 and 201, and to signal processor, 200. Each remote station transmits each particular news item within the particular format of a Transmit-News-Item SPAM message, and receiving any given message in a Transmit-News-Item SPAM message ... In due course, said remote news-service-A station ...
	For example Column 19 lines 35-41.	Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may	*For example* Page 449 lines 13-35.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at

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		receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that **relate** to the stocks in its stored portfolio.		each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.) Alternatively, microcomputer, 205, is caused in a predetermined fashion (for example, by a SPAM message a given transmission monitored by signal processor, 200, in any of the above described fashions) automatically to telephone a remote data service computer, by means of network, 262, in a fashion well known in the art, and to cause said remote computer to select and transmit the particular closing price datum or data of the stock or stocks of the portfolio of said microcomputer, 205, thereby causing said microcomputer, 205, to record said datum or data in a predetermined fashion.
identifies said content of said second of said at least two of said plurality of media by processing a second identifier, said method further comprising the step of	Column 19 lines 17-23.	... processor or monitor, 12, which reacts, in a predetermined fashion by passing also externally to microcomputer, 205, all signals that it passes to buffer/ comparator, 14. Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18. Page 267 lines 20-28 from example #5.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, ... All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions

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				described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, ... to input .... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on-CC13... Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	... to receive the transmission of cable channel 13; ...
	Column 19 lines 14-15.	... pass all program and channel identifiers on all programing being cablecast on the multi-channel system.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, of the station of Fig. 7 and 7C ....

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			Page 248 lines 22-26 from example #5.	Via a conventional multi- channel cable transmission, in a fashion well known in the art, four channels of conventional television programming and two conventional FM radio signals are inputted to a first alternate contact of switch, 1, and to mixer, 2.
			Page 250 lines 13-16 from example #5.	Example #5 begins with the embedding and transmitting, at the remote station that originates the "Wall Street Week" broadcast, of the first message of the "Wall Street Week" program …
			Page 252 lines 15-35 from example #5.	Then, in a predetermined fashion, control processor, 39J, determines that said first command contains subject matter meter-monitor information causing said control processor, 39J, to transmit a message that consists of … execution segment information that is addressed to microcomputer, 205, (and that causes microcomputer, 205, to process the information of the meter- monitor segment immediately following said execution segment information as new programming now being transmitted on the channel of the channel mark of said meter-monitor segment segment) then meter-monitor segment information that includes the "**program unit identification code**" and subject matter information of said first command and **the channel mark of cable channel 13** … (Said message whose transmission is caused by receiving said first command enables microcomputer, 205, in a fashion described more fully below, to tune automatically to receive the program that said "program unit identification code" identifies if said program is of interest, …
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new-program-message (#5)

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				and the 1st-new-radio-program- message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
transmitting a first one of said first identifier and said second identifier.	Column 12 lines 45-47.	Beyond channel combining system and multiplexer, **92**, amplifier, **94**, transmits programing to signal processor, **71**, and signal processor, **96**, ...	Page 337 lines 1-8.	Fig. 6 shows particular signal processor system monitoring apparatus associated with the intermediate station of Fig. 6. In field distribution system, 93, amplifier, 94, inputs programming transmissions to signal processor system, 71, (where said transmissions are inputed to one alternate contact of the switch, 1, of the signal processor of said system, 71), and amplifier, 95, inputs programming transmissions to signal processor, 96, ...
	In general Column 18 lines 48-55.	Several separate news services transmit news on different channels carried on the multi-channel cable transmission to converter boxes, **222** and **201**, and to signal processor, **200**. The news services preceed each news transmission with a unique signal that uniquely identifies the company or companies to which the news item refers and/or the industries.	*In general* Page 420 line 21 to page 421 line 7.	Two remote stations--remote news-service-A station and remote news-service-B station--transmit, from geographically separate locations, two different broadcast print transmissions. The intermediate transmission station of Fig. 6 receives and retransmits information the transmissions of said remote stations on digital data channels A and B, respectively, that are inputed to converter boxes, 222 and 201, and to signal processor, 200. Each remote station transmits each particular news item within the particular format of a Transmit-News-Item SPAM message, and receiving any given message in a Transmit-News-Item SPAM message ... In due course, said remote news-service-A station ...

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	Column 19 lines 35-41.	Each weekday, microcomputer, **205,** receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.	Page 449 lines 13-35.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.) Alternatively, microcomputer, 205, is caused in a predetermined fashion (for example, by a SPAM message a given transmission monitored by signal processor, 200, in any of the above described fashions) automatically to telephone a remote data service computer, by means of network, 262, in a fashion well known in the art, and to cause said remote computer to select and transmit the particular closing price datum or data of the stock or stocks of the portfolio of said microcomputer, 205, thereby causing said microcomputer, 205, to record said datum or data in a predetermined fashion.
	Column 19 lines 14-15.	… pass all program and channel identifiers on all programing being cablecast on the multi-channel system.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, of the station of Fig. 7 and 7C ….
			Page 248 lines 22-26 from example #5.	Via a conventional multi- channel cable transmission, in a fashion well known in the

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				art, four channels of conventional television programming and two conventional FM radio signals are inputted to a first alternate contact of switch, 1, and to mixer, 2.
			Page 250 lines 13-16 from example #5.	Example #5 begins with the embedding and transmitting, at the remote station that originates the "Wall Street Week" broadcast, of the first message of the "Wall Street Week" program ….
			Page 252 lines 15-35 from example #5.	Then, in a predetermined fashion, control processor, 39J, determines that said first command contains subject matter meter-monitor information causing said control processor, 39J, to transmit a message that consists of … execution segment information that is addressed to microcomputer, 205, (and that causes microcomputer, 205, to process the information of the meter- monitor segment immediately following said execution segment information as new programming now being transmitted on the channel of the channel mark of said meter-monitor segment segment) then meter-monitor segment information that includes the "**program unit identification code**" and subject matter information of said first command and **the channel mark of cable channel 13** … (Said message whose transmission is caused by receiving said first command enables microcomputer, 205, in a fashion described more fully below, to tune automatically to receive the program that said "program unit identification code" identifies if said program is of interest, …
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new-program-message (#5) and the 1st-new-radio-program- message (#5) signals are addressed to microcomputer, 205.

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				Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
	Column 19 lines 17-23.	... processor or monitor, **12**, which reacts, in a predetermined fashion by passing also externally to microcomputer, **205**, all signals that it passes to buffer/ comparator, **14**. Analyzing these identifier signals in a predetermined fashion, microcomputer, **205**, determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, ...
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, ... to input ... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputed is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on- CC13... Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to*

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				view (or record) said "Wall Street Week" program when said program is transmitted. Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	... to receive the transmission of cable channel 13; ...
59. The method of claim 58, wherein said transmitter station transmits said first identifier and said second identifier to said receiver station, said method further comprising the step of	Column 12 lines 45-47.	Beyond channel combining system and multiplexer, **92**, amplifier, **94**, transmits programing to signal processor, **71**, and signal processor, **96**, ...	Page 337 lines 1-8.	Fig. 6 shows particular signal processor system monitoring apparatus associated with the intermediate station of Fig. 6. In field distribution system, 93, amplifier, 94, inputs programming transmissions to signal processor system, 71, (where said transmissions are inputted to one alternate contact of the switch, 1, of the signal processor of said system, 71), and amplifier, 95, inputs programming transmissions to signal processor, 96, ...
	In general Column 18 lines 48-55.	Several separate news services transmit news on different channels carried on the multi-channel cable transmission to converter boxes, **222** and **201**, and to signal processor, **200**. The news services preceed each news transmission with a unique signal that uniquely identifies the company or companies to which the news item refers and/or the industries.	*In general* Page 420 line 21 to page 421 line 7.	Two remote stations--remote news-service-A station and remote news-service-B station--transmit, from geographically separate locations, two different broadcast print transmissions. The intermediate transmission station of Fig. 6 receives and retransmits information the transmissions of said remote stations on digital data channels A and B, respectively, that are inputted to converter boxes, 222 and 201, and to signal processor, 200.

Claim Language of Instant Application	Applicants' Priority U.S. Pat. No. 490		Instant Specification	
	Reference	Language	Reference	Language
				Each remote station transmits each particular news item within the particular format of a Transmit-News-Item SPAM message, and receiving any given message in a Transmit-News-Item SPAM message … In due course, said remote news-service-A station …
	Column 19 lines 35-41.	Each weekday, microcomputer, **205**, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.	Page 449 lines 13-35.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.) Alternatively, microcomputer, 205, is caused in a predetermined fashion (for example, by a SPAM message a given transmission monitored by signal processor, 200, in any of the above described fashions) automatically to telephone a remote data service computer, by means of network, 262, in a fashion well known in the art, and to cause said remote computer to select and transmit the particular closing price datum or data of the stock or stocks of the portfolio of said microcomputer, 205, thereby causing said microcomputer, 205, to record said datum or data in a predetermined fashion.

Claim Language of Instant Application	Applicants' Priority U.S. Pat. No. '490		Instant Specification	
	Reference	Language	Reference	Language
	Column 19 lines 14-15.	... pass all program and channel identifiers on all programing being cablecast on the multi-channel system.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, of the station of Fig. 7 and 7C ....
			Page 248 lines 22-26 from example #5.	Via a conventional multi- channel cable transmission, in a fashion well known in the art, four channels of conventional television programming and two conventional FM radio signals are inputted to a first alternate contact of switch, 1, and to mixer, 2.
			Page 250 lines 13-16 from example #5.	Example #5 begins with the embedding and transmitting, at the remote station that originates the "Wall Street Week" broadcast, of the first message of the "Wall Street Week" program ....
			Page 252 lines 15-35 from example #5.	Then, in a predetermined fashion, control processor, 39J, determines that said first command contains subject matter meter-monitor information causing said control processor, 39I, to transmit a message that consists of ... execution segment information that is addressed to microcomputer, 205, (and that causes microcomputer, 205, to process the information of the meter- monitor segment immediately following said execution segment information of the meter- monitor segment immediately following said execution segment information as new programming now being transmitted on the channel of the channel mark of said meter-monitor segment segment) then meter-monitor segment information that includes the **"program unit identification code"** and subject matter information of said first command and **the channel mark of cable channel 13** .... (Said message whose transmission is caused by receiving said first command enables microcomputer, 205, in a fashion described more fully below, to tune automatically to receive the program that said

Claim Language of Instant Application	Applicants' Priority U.S. Pat. No. '490		Instant Specification	
	Reference	Language	Reference	Language
			Page 267 lines 20-28 from example #5.	"program unit identification code" identifies if said program is of interest, … All eight of said messages are commands. The 1st- and 3rd-new-program-message (#5) and the 1st-new-radio-program- message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
controlling said transmitter station to transmit	Column 11 lines 50-57.	… if controller/computer, **73**, determines that programing incoming via receiver, **53**, should be transmitted immediately to the field distribution system, **93**, via cable channel modulator, **87**, controller/computer, **73**, instructs matrix switch, **75**, to configure its switches so as to transfer programing transmissions inputted from TV receiver, **53**, to the output that leads to modulator, **87**.	Page 328 line 22 to page 329 line 1.	For example, computer, 73, receives a given SPAM message that contains given "program unit identification code" information and the added source mark information of said message identifies distribution amplifier, 63. Receiving said message causes computer, 73, to determine, in a predetermined fashion, that said "code" information matches particular preprogrammed schedule information of programming that is scheduled to be retransmitted immediately upon receipt to field distribution system, 93, via cable channel modulator, 87. In its preprogrammed fashion, so determining causes computer, 73, to cause matrix switch, 75, to configure its switches so as to transfer the programming transmission inputted (via distribution amplifier, 63) to matrix switch, 75, from TV receiver, 53, to that output of matrix switch, 75, that outputs to modulator, 87.
said first identifier and	Column 19 lines 35-41.	Each weekday, microcomputer, **205**, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may	Page 449 lines 13-35.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at

Claim language of Instant Application	Applicants' Priority U.S. Pat. No. '490		Instant Specification	
	Reference	Language	Reference	Language
		receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.		each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.) Alternatively, microcomputer, 205, is caused in a predetermined fashion (for example, by a SPAM message a given transmission monitored by signal processor, 200, in any of the above described fashions) automatically to telephone a remote data service computer, by means of network, 262, in a fashion well known in the art, and to cause said remote computer to select and transmit the particular closing price datum or data of the stock or stocks of the portfolio of said microcomputer, 205, thereby causing said microcomputer, 205, to record said datum or data in a predetermined fashion.
said second identifier	Column 19 lines 14-15.	... pass all program and channel identifiers on all programing being cablecast on the multi-channel system.	Page 435 lines 16-18. Page 248 lines 22-26 from example #5.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, of the station of Fig. 7 and 7C .... Via a conventional multi- channel cable transmission, in a fashion well known in the art, four channels of conventional television programming and two conventional FM radio signals are inputted to a first alternate contact of switch, 1, and to mixer, 2.

Claim Language of Instant Application	Applicants' Priority U.S. Pat. No. '490		Instant Specification	
	Reference	Language	Reference	Language
			Page 250 lines 13-16 from example #5.	Example #5 begins with the embedding and transmitting, at the remote station that originates the "Wall Street Week" broadcast, of the first message of the "Wall Street Week" program …
			Page 252 lines 15-35 from example #5.	Then, in a predetermined fashion, control processor, 39J, determines that said first command contains subject matter meter-monitor information causing said control processor, 39J, to transmit a message that consists of … execution segment information that is addressed to microcomputer, 205, (and that causes microcomputer, 205, to process the information of the meter- monitor segment immediately following said execution segment information as new programming now being transmitted on the channel of the channel mark of said meter-monitor segment segment) then meter-monitor segment information that includes the **"program unit identification code"** and subject matter information of said **first command and the channel mark of cable channel 13** … (Said message whose transmission is caused by receiving said first command enables microcomputer, 205, in a fashion described more fully below, to tune automatically to receive the program that said "program unit identification code" identifies if said program is of interest, …
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new-program-message (#5) and the 1st-new-radio-program- message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands

Claim Language of Instant Application		Applicants' Priority U.S. Pat. No. '490		Instant Specification	
Reference	Language	Reference	Language	Reference	Language
		Column 19 lines 17-23.	... processor or monitor, **12**, which reacts, in a predetermined fashion by passing also externally to microcomputer, **205**, all signals that it passes to buffer/ comparator, **14**. Analyzing these identifier signals in a predetermined fashion, microcomputer, **205**, determines that "Wall Street Week" is being televised on channel X.		are called "guide commands" because they can guide station control apparatus to desired programming.)
				Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, ...
				Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
				Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, ... to input .... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on-CC13....
					Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and

Claim Language of Instant Application	Applicants' Priority U.S. Pat. No. 490		Instant Specification	
	Reference	Language	Reference	Language
				determines a match with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
			Page 439 lines 14-15.	… to receive the transmission of cable channel 13; …
at different times.	Column 19 lines 35-37.	Each weekday, microcomputer, **205,** receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day.	Page 449 lines 13-26.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.)
	Column 19 lines 20-23.	Analyzing these identifier signals in a predetermined fashion, microcomputer, **205,** determines that "Wall Street Week" is being televised on channel X.	Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new-program-message (#5) and the 1st-new-radio-program- message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired

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Claim Language of Instant Application		Applicants' Priority U.S. Pat. No. '490		Instant Specification	
	Reference	Language	Reference	Language
				Page 435 lines 16-25.	programming.) In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, of the station of Fig. 7 and 7C detects one instance of the Select-WSW-Program-Unit SPAM message of the station of Fig. 6 … Receiving said Select-WSW-Program-Unit message causes the apparatus of said signal processor, 200, to input said message to the microcomputer, 205, of said station.
				Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program-Unit message causes decoder, 203, … to input … the information segment of said message to the CPU of microcomputer, 205, and to cause said CPU to execute the information so inputted as a machine language job. The information so inputted is the aforementioned determine-whether-to-select instructions that contain said particular specific-WSW information and said please-fully-enable-WSW-on-CC13-at-particular-8:30 information. Executing said determine-whether-to-select instructions causes microcomputer, 205, to… Said instructions contain one instance, and … program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.* Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer,

Claim Language of Instant Application	Applicants' Priority U.S. Pat. No. '490		Instant Specification	
	Reference	Language	Reference	Language
				205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20.
	Column 19 lines 45-46.		Page 439 lines 14-15.	…to receive the transmission of cable channel 13;…
		When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, …	Page 451 lines 6-7.	When the "Wall Street Week" transmission begins at 8:30 PM on a Friday evening, …
60. The method of claim 59, wherein said receiver station is enabled to respond to	Column 19 lines 42-44.	Microcomputer, 205, is preprogramed to respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programing transmission.	Page 21 lines 20-24.	Microcomputer, 205, is preprogrammed to … respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programming transmission.
a processor instruction	Column 19 lines 60 to page 20 line 2.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205. This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.	Page 25 line 34 to page 26 line 2.	At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205; …
			Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed … to correct errors … by means of forward error correction techniques well known in the art; to convert, as may be required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; … to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus

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	Reference	Language	Reference	Language
			Page 26 lines 4-11.	...
				Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
			Page 451 line 3.	And the Fig. 1C combining is displayed.
based on said first identifier and	Column 19 lines 35-41.	Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It **records** those prices that relate to the stocks in its stored portfolio.	Page 449 lines 13-35.	Each weekday after 4:30 PM, a remote stock-price-data- transmission station transmits all closing stock price data applicable that day and causes apparatus at each subscriber station, in a predetermined fashion, to select and record at the microcomputer, 205, of said station the particular closing price datum or data that apply to the particular stock or stocks of the preprogrammed portfolio of said computer. (Said remote station transmits said closing stock price data and causes specific subscriber stations to select and process their specific information of interest in the fashion in which remote news-service-A station transmitted the AT&T news item and caused selected stations to select and process, in their specific fashions, the information of said item.) Alternatively, microcomputer, 205, is caused in a predetermined fashion (for example, by a SPAM message a given transmission monitored by signal processor, 200, in any of the above described fashions) automatically to telephone a remote data service computer, by means of network, 262, in a fashion well known in the art, and to cause said remote

Claim Language of Instant Application	Applicants' Priority U.S. Pat. No. '490		Instant Specification	
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				computer to select and transmit the particular closing price datum or data of the stock or stocks of the portfolio of said microcomputer, 205, thereby causing said microcomputer, 205, to record said datum or data in a predetermined fashion.
said second identifier, said method further comprising the step of	Column 19 lines 17-23.	... processor or monitor, **12**, which reacts, in a predetermined fashion by passing also externally to microcomputer, **205**, all signals that it passes to buffer/ comparator, **14**. Analyzing these identifier signals in a predetermined fashion, microcomputer, **205**, determines that "Wall Street Week" is being televised on channel X.	Page 435 lines 16-18.	In due course, while scanning sequentially all channels in the fashion of example #5, the apparatus of the signal processor, 200, ...
			Page 267 lines 20-28 from example #5.	All eight of said messages are commands. The 1st- and 3rd-new- program-message (#5) and the 1st-new-radio-program-message (#5) signals are addressed to microcomputer, 205. Each informs said microcomputer of new programming transmissions to which said microcomputer can tune appropriate station receiver and display apparatus in fashions described below. (Hereinafter said commands are called "guide commands" because they can guide station control apparatus to desired programming.)
			Page 436 line 9 to page 437 line 3.	Receiving said Select-WSW-Program- Unit message causes decoder, 203, ... to input .... the information segment of said message to the CPU of microcomputer, 205, ... The information so inputted is the aforementioned determine-whether- to-select instructions that contain said particular specific-WSW information and said ... enable-WSW-on-CC13.... Said instructions contain one instance, and ... program-unit-of-interest information that is preprogrammed at said microcomputer, 205, contains a second instance of specific-WSW information, *which second instance reflects the wish of the subscriber of said station to view (or record) said "Wall Street Week" program when said program is transmitted.*

Claim Language of Instant Application	Applicants' Priority U.S. Pat. No. '490		Instant Specification	
	Reference	Language	Reference	Language
			Page 439 lines 14-15.	Automatically, microcomputer, 205, compares said one instance to said program-unit-of-interest information and **determines a match** with said second instance. Determining a match causes microcomputer, 205, automatically to input said please-fully-enable-WSW -on-CC13-at-particular- 8:30 information to the controller, 20. ... to receive the transmission of cable channel 13; ...
transmitting said processor instruction from said transmitter station to	Column 12 lines 45-47.	Beyond channel combining system and multiplexer, 92, amplifier, 94, transmits programing to signal processor, 71, and signal processor, 96, ...	Page 337 lines 1-8.	Fig. 6 shows particular signal processor system monitoring apparatus associated with the intermediate station of Fig. 6. In field distribution system, 93, amplifier, 94, inputs programming transmissions to signal processor system, 71, (where said transmissions are inputed to one alternate contact of the switch, 1, of the signal processor of said system, 71), and amplifier, 95, inputs programming transmissions to signal processor, 96, ...
	Column 19 lines 43-44.	... instruction signals embedded in the "Wall Street Week" programing transmission.	Page 21 lines 23-24.	... instruction signals embedded in the "Wall Street Week" programming transmission.
said receiver station.	Column 19 lines 60-66.	At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205. This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, ...	Page 25 line 33 to page 26 line 2..	Then the host says, "And here is what your portfolio did." At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205; and executed ....
			Page 37 line 26 to page 38 line 8.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38,

Claim Language of Instant Application	Applicants' Priority U.S. Pat. No. '490		Instant Specification	
	Reference	Language	Reference	Language
			Page 26 lines 4-8.	43, and 46. Upon receiving any given instance of signal information, controller, 39, 44, or 47, is preprogrammed to process said information automatically. Controller, 39, is preprogrammed to … correct errors in retained received information by means of forward error correction techniques well known in the art; to convert, as may be required, the corrected information, by means of input protocol techniques well known in the art, into digital information that subscriber station apparatus can receive and process; … to identify in a predetermined fashion or fashions subscriber station apparatus to which said signal information should be transferred; and to transfer said signals to said apparatus. Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M.

Claims 61-65 are cancelled.